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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

**ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS
(GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH
ANTIGENIC PEPTIDES**

5 CROSS-REFERENCE TO RELATED APPLICATIONS

[1] The present application claims priority from United States provisional patent application No. 60/257,144, filed December 19, 2000 and presently pending.

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10 ABSTRACT

[3]

BACKGROUND

[4] G protein-coupled receptors (GPCRs) are a large group of proteins that transmit signals across cell membranes. In general terms, GPCRs function somewhat like doorbells.
15 When a molecule outside the cell contacts the GPCR (pushes the doorbell), the GPCR changes its shape and activates "G proteins" inside the cell (similar to the doorbell causing the bell to ring inside the house, which in turn causes people inside to answer the door). GPCRs are like high-security doorbells because each GPCR responds to only one specific kind of signaling molecule (called its "endogenous ligand"), kind of like a high-tech door
20 lock that responds to only one fingerprint. Part of the GPCR is located outside the cell (the "extracellular domain"), part spans the cell's membrane (the "transmembrane domain"), and part is located inside the cell (the "intracellular domain"). Thus, GPCRs are embedded in the outer membrane of a cell and recognize and bind certain signaling molecules that are present in the spaces surrounding the cell. GPCRs are used by cells to keep an eye on the cells' own
25 activity and on the environment. In organisms that have many cells, the cells use GPCRs to talk to each other.

[5] GPCRs are important to the pharmaceutical industry and other industries. For example, many drugs, including some antibody-based drugs, act by binding to specific GPCRs and initiating or inhibiting their intracellular actions, and diagnostics and therapeutics
30 based on GPCRs or on antibodies for GPCRs are becoming increasingly important.

[6] General concepts about GPCRs are discussed in more scientific terms in the following paragraphs.

[7] The GPCR superfamily has at least 250 members, Strader et al., FASEB J., 9:745-754 (1995); Strader et al., Annu. Rev. Biochem., 63:101-32 (1994). GPCRs play important

roles in diverse cellular processes including cell proliferation and differentiation, leukocyte migration in response to inflammation, gene transcription, vision (the rhodopsins), smell (the olfactory receptors), neurotransmission (muscarinic acetylcholine, dopamine, and adrenergic receptors), and hormonal response (luteinizing hormone and thyroid-stimulating hormone receptors). Strader et al., *supra*; U.S. Patent nos. 5,994,097 and 6,063,596. Many important drugs produce their therapeutic actions through their interaction with GPCRs.

[8] Nucleotide and amino acid sequences for many GPCRs have been reported and can be found in public databases such as GenBank and GenPept. Generally speaking, different GPCRs show both structural and sequence similarities. The most conserved domains of GPCRs are the transmembrane domains and the first two cytoplasmic loops. GPCRs range in size from under 400 to over 1000 amino acids. Coughlin, S. R., *Curr. Opin. Cell Biol.* 6:191-197 (1994). They contain seven hydrophobic transmembrane regions that span the cellular membrane and form a bundle of antiparallel alpha helices. McKee K.K., *supra*. The bundle of helices forming the transmembrane regions provide many structural and functional features of the receptor. In most cases, the bundle of helices form a pocket that binds a signaling molecule. However, when the binding site accommodates larger molecules, the extracellular N-terminal segment or one or more of the three extracellular loops participate in binding and in subsequent induction of conformational change in the intracellular portions of the receptor. These helices are joined at their ends by three intracellular and three extracellular loops. GPCRs also contain cysteine disulfide bridges between the second and third extracellular loops, an extracellular N-terminus, and a cytoplasmic or intracellular C-terminus. The N-terminus is often glycosylated, while the C-terminus is generally phosphorylated. A conserved, acidic-Arg-aromatic triplet present in the second cytoplasmic loop may interact with G Proteins. Most GPCRs contain a characteristic consensus pattern. Watson, S. and S. Arkinstall, *The G protein Linked Receptor Facts Book*, Academic Press, San Diego, CA (1994); Bolander, F. F. *Molecular Endocrinology*, Academic Press, San Diego, CA (1994).

[9] Although GPCRs have many features in common, each GPCR has its own unique characteristics as well. GPCRs have varying nucleotide and amino acid sequences, and varying antigenicity. GPCRs bind a diverse array of specific, extracellular signaling molecules (which can also be referred to as "ligands") including peptides, cytokines, hormones, neurotransmitters, growth factors, and specialized stimuli such as photons,

flavorants, and odorants. Identified ligands include, for example, purines, nucleotides (*e.g.*, adenosine, cAMP, NTPs), biogenic amines (*e.g.*, epinephrine, norepinephrine, dopamine, histamine, noradrenaline, serotonin), acetylcholine, peptides (*e.g.*, angiotensin, calcitonin, chemokines, corticotropin releasing factor, galanin, growth hormone releasing hormone, gastric inhibitory peptide, glucagon, neuropeptide Y, neurotensin, opioids, thrombin, secretin, somatostatin, thyrotropin releasing hormone, vasopressin, vasoactive intestinal peptide), lipids and lipid-based compounds (*e.g.*, cannabinoids, platelet activating factor), excitatory and inhibitory amino acids (*e.g.*, glutamate, GABA), ions (*e.g.*, calcium), and toxins.

[10] In general, a GPCR binds only one type of signaling molecule and GPCRs are classified according to subfamilies based upon their selectivity and specificity for a particular ligand. When the ligand for a receptor is not known, the receptor is known as an orphan receptor. The extracellular domain interacts with or binds to certain signaling molecules or ligands located outside of the cell. The binding of a ligand to the extracellular domain alters the conformation of the receptor's intracellular domain causing the activation of a G protein. The G protein then activates or inactivates a separate plasma-membrane-bound enzyme or ion channel. This chain of events alters the concentration of one or more intracellular messengers (second messengers) such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or Ca^{2+} . These, in turn, alter the activity of other intracellular proteins such as cAMP-dependent protein kinase and Ca^{2+} /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal. Baldwin, J.M., Curr. Opin. Cell Biol. 6:180-190 (1994). The G protein is deactivated by hydrolysis of GTP by GTPase. U.S. Patent Nos. 5,994,097 and 6,063,596.

[11] GPCR mutations, both of the loss-of-function and of the activating variety, have been associated with numerous human diseases, Coughlin, *supra*. For example, retinitis pigmentosa may arise from either loss-of-function or activating mutations in the rhodopsin gene. Somatic activating mutations in the thyrotropin receptor cause hyperfunctioning thyroid adenomas, Parma, J. et al., Nature 365:649-651 (1993). Parma et al. indicate that it may be possible that certain G protein-coupled receptors susceptible to constitutive activation may behave as proto-oncogenes. Interestingly, GPCRs have functional homologues in human cytomegalovirus and herpesvirus, so GPCRs may have been acquired during evolution for viral pathogenesis, Strader et al., FASEB J., 9:745-754 (1995); Arvanitakis et al., Nature, 385:347-350 (1997); Murphy, Annu. Rev. Immunol. 12:593-633 (1994). The

importance of the GPCR superfamily is further highlighted by the recent discoveries that some of its family members, the chemokine receptors CXCR4/Fusin and CCR5, are co-receptors for T cell-tropic and macrophage-tropic HIV virus strains, respectively, Alkhatib et al., Science, 272:1955 (1996); Choe et al., Cell, 85:1135 (1996); Deng et al., Nature, 381:661
5 (1996); Doranz et al., Cell, 85:1149 (1996); Dragic et al., Nature, 381:667 (1996); Feng et al., Science, 272:872 (1996). It is conceivable that blocking these receptors may prevent infection by the human immunodeficiency (HIV) virus. Other GPCR-related items include regulating cellular metabolism and diagnosing, treating and preventing particular diseases associated with particular GPCRs.

10 [12] One important way to evaluate GPCRs and antibodies for GPCRs as novel drug targets and for other purposes such as diagnostics is through the creation and use of databases. Such databases can provide large amounts of information about genes, proteins, and other biological matter. An excellent example of such a database is the GPCR database created and maintained by LifeSpan BioSciences, Inc., Seattle, Washington, USA, which
15 database is available by subscription to researchers and others needing such information. The information in the databases can, for example, be searched, compared, and analyzed. The compilation of such databases, as well as the searching, comparing, etc., of the databases, can be referred to as the field of "bioinformatics." Investigations largely related to genes, such as the information found from the sequencing of the human genome, can be called "genomics"
20 while similar activities on proteins can be called "proteomics."

[13] There has gone unmet a need for improved systems, compositions, methods, and the like relating to improved antigenicity of peptides from GPCRs and antibodies relating thereto. The present invention provides these and other advantages.

SUMMARY

25 [14] The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention
30 provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known

antibodies. The present invention also provides improved methods of selecting antigenic peptides from any desired protein or polypeptide, as well as antigenic peptides so produced and antibodies against such antigenic peptides.

[15] The antigenic peptides and antibodies herein can be used, for example, to detect the presence or absence of corresponding GPCRs. They can be used to diagnose a variety of diseases and disorders in which GPCRs are involved, such as, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[16] The association of particular GPCRs with particular diseases, disorders or conditions will be apparent to a person of ordinary skill in the art in view of the present application, and thus the association with the antibodies of the present invention to the corresponding diseases, disorders or conditions.

5 [17] Thus, in one aspect the present invention provides isolated antigenic peptides according to any one of SEQ ID NOS. 692-2292. The isolated antigenic peptides also comprise an amino acid sequences that are at least about 90% or 95% identical to such sequences, or be an analog of such sequences, or comprise a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids set forth in any one of such
10 sequences or contain no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any of such sequences. The present invention also provides antibodies, particularly isolated antibody having high specificity and high affinity or avidity for a particular GPCR or other target polypeptide or protein, generated using the antigenic peptides discussed herein.

15 [18] The present invention also provides isolated nucleic acid molecules encoding an antigenic peptide or antibody as described herein. The molecule can encode a naturally occurring human antigenic peptide. In some embodiments, the present invention provides processes for producing an isolated polynucleotide can comprise hybridizing a nucleotide encoding an antigenic peptide as discussed herein to DNA such as genomic DNA under
20 stringent or highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

[19] The present invention also provides kits and assays, such as kits for the detection of antibodies against a particular GPCR or other target polypeptide in a sample comprising: a) an isolated antigenic peptide as discussed herein and derived from the particular GPCR, and
25 b) at least one of a reagent or a device for detecting the antibodies, or comprising: a) an isolated antibody as described herein, and b) at least one of a reagent or a device for detecting the antibody. The assays include detection of a particular GPCR in a sample, comprising: a) providing an isolated antigenic peptide, b) contacting the isolated antigenic peptide corresponding to the particular GPCR with the sample under conditions suitable and for a
30 time sufficient for the antigenic peptide to bind to one or more antibodies specific for the target protein present in the sample, to provide an antibody-bound target protein, and c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the

sample contains the particular GPCR. The assays can further comprise the step of binding the isolated antigenic peptide or the antibody to a solid substrate, and the sample can be an unpurified sample, for example from a human being.

[20] The assay can be selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

[21] In other aspects, the present invention provides methods of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence such as a polypeptide or protein wherein the antigenic peptide has a length of about 5 to about 100 amino acids, typically 6 amino acids to about 50 amino acids, and preferably 7 amino acids to about 20 amino acids. The methods comprise: a) searching the candidate polypeptide sequence using a comparison window of the length, and b) selecting against amino acid sequences of the length and having at least 1 to 3 or 4 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, the method comprises selecting against at least 5 to all of the characteristics.

[22] The methods can comprise, independently or in addition, selecting against amino acid sequences of the desired length having at least one of the following characteristics 1) sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide that can be different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences. The posttranslational modification sites can be phosphorylation or glycosylation sites. The methods can also comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

[23] These and other aspects, features, and embodiments are set forth within this application, including the following Detailed Description and attached drawings. The present invention comprises a variety of aspects, features, and embodiments; such multiple aspects,

features, and embodiments can be combined and permuted in any desired manner. In addition, various references are set forth herein, including in the Cross-Reference To Related Applications, that discuss certain compositions, apparatus, methods, or other information; all such references are incorporated herein by reference in their entirety and for all their teachings and disclosures, regardless of where the references may appear in this application.

BRIEF DESCRIPTION OF THE DRAWING

[24] Figure 1 depicts representative examples of the nucleotide and amino acid sequences of the GPCRs for which antigenic peptides are set forth herein, SEQ ID NOS. 1 - 691.

10 [25] Figure 2 depicts amino acid sequences for the antigenic peptides for the GPCRs herein, SEQ ID NOS. 692-2292.

[26] Figure 3 depicts a listing of GPCRS for which commercially available antibodies are putatively available.

DETAILED DESCRIPTION

15 A. INTRODUCTION AND OVERVIEW

[27] Diseases such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases are serious health problems in the modern world. Any improvement in the diagnosis, treatment or other remediation of such diseases is a significant advance for millions of people. The present invention provides methods of identifying and selecting desirable antigenic peptides for GPCRs and other desired target or candidate proteins and polypeptides. The present invention also provides the antigenic peptides themselves, as well as antibodies against the antigenic peptides (and against proteins or polypeptides containing such antigenic peptides), and related diagnostics, antibody-based therapeutics directed to certain diseases and conditions, and other helpful compositions, systems, kits, assays and the like. The compositions, methods, and the like can be useful, for example, as agonists, antagonists, probes, and otherwise as may be desired.

[28] The antigenic peptides have been carefully selected using specific selection criteria and methodologies set forth herein to take advantage of particularly advantageous regions of the GPCRs from which they have been derived to provide unusually specific and

immunogenic antigens. These antigenic peptides are particularly useful for producing highly specific antibodies against the antigenic peptides, which, in turn, also means antibodies that are highly specific for the corresponding GPCRs containing the antigenic peptides. Accordingly, the antigenic peptides of the present invention, and the antibodies produced therefrom, are particularly useful for high specificity, low noise diagnostics and, in the case of the antibodies, for certain antibody-based therapeutics, as well as methods, kits, systems, and the like incorporating or based on such antigenic peptides or antibodies.

[29] The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected.

[30] The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[31] Figure 1 sets forth the DNA and protein sequences for the GPCRs from which the antigenic peptides of the present invention were derived SEQ ID NOS. 1-691. Figure 2 sets forth the amino acid sequences of exemplary antigenic peptides, SEQ ID NOS. 692-2292. The sequences in Figures 1 and 2 are listed according to SEQ ID NO and LSID, which is an identification number assigned to the given sequence in the LifeSpan Biosciences databases. The sequences in Figure 2 also include an identifier LPID, which is also an identification number assigned to the given sequence in the LifeSpan Biosciences databases. Figure 3 depicts GPCRs for which it has been reported that antibodies are commercially available, SEQ ID NOS. 1, 3, 5, 11, 13, 15, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 43, 45, 49, 51, 53, 57, 59, 61, 63, 65, 67, 69, 70, 71, 73, 75, 77, 79, 83, 85, 97, 99, 101, 103, 105, 107, 113, 115, 117, 121, 125, 135, 139, 143, 145, 147, 151, 155, 157, 159, 161, 169, 171, 173, 175, 177, 183, 185, 187, 189, 191, 192, 194, 200, 202, 206, 208, 214, 216, 218, 228, 236, 238, 240, 248, 250, 264, 295, 299, 301, 305, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 347, 349, 351, 361, 365, 367, 369, 371, 377, 379, 385, 387, 389, 391, 397,

423, 435, 439, 457, 459, 461, 462, 468, 470, 472, 503, 507, 515, 535, 537, 546, 548, 552, 562, 628, 636; Applicants do not represent that any of the antibodies in Figure 3 that such antibodies are actually commercially available nor that they have any significant specificity nor affinity for the GPCRs reported. For GPCRs for which no antigens or antibodies were previously known, the present invention provides valuable antigenic peptides and antibodies (see, e.g., SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.); for GPCRs for which antigens or antibodies are known, the present invention provides improved antigens in the form of antigenic peptides and improved antibodies (see, e.g., SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, which are antigenic peptides derived from GPCRs for which antibodies are reportedly commercially available). The antigenic peptides and antibodies, and uses and assays, etc., related to the antigenic peptides, are discussed further below.

[32] The discussion herein, including the following passages, has been separated by headings for convenience. The disclosure under a given heading is not restricted to that heading. For example, the discussion in the definitions section is a part of the disclosure of the invention, the discussion on antigenic peptides also contains discussion related to probes and diagnostics, and the discussion on antibodies contains discussion related to therapeutic compositions, etc.

B. DEFINITIONS

[33] The following paragraphs provide a non-exhaustive list of definitions of some of the terms and phrases as used herein. All terms used herein, including those specifically described below in this section, are used in accordance with their ordinary meanings unless the context or definition indicates otherwise. Also unless indicated otherwise, except within

the claims, the use of "or" includes "and" and vice-versa. Non-limiting terms are not to be construed as limiting unless expressly stated (for example, "including" means "including without limitation" unless expressly stated otherwise).

[34] The terms set forth in this application are not to be interpreted in the claims as indicating a "means plus function" relationship unless the word "means" is specifically recited in a claim, and are to be interpreted in the claims as indicating a "means plus function" relationship where the word "means" is specifically recited in a claim. Similarly, the terms set forth in this application are not to be interpreted in method or process claims as indicating a "step plus function" relationship unless the word "step" is specifically recited in the claims, and are to be interpreted in the claims as indicating a "step plus function" relationship where the word "step" is specifically recited in a claim.

[35] "Agonist" indicates a substance, such as a molecule or compound, that interacts with a particular GPCR, for example by binding to the GPCR, to activate, increase, or prolong the amount or the duration of the effect of the biological activity or functionality of the GPCR. Agonists include proteins, nucleic acids, carbohydrates, or any other molecules that bind to and positively modulate the effect of the GPCR. Agonists and other modulators of the particular GPCR can be identified using *in vitro* or *in vivo* assays for G protein-coupled receptor expression or G protein-mediated signaling. For example, assays for agonists and other modulators include expressing a particular GPCR in cells or cell membranes, applying putative modulator compounds in the presence or absence of a specific known or putative ligand and then determining the functional effects on the particular GPCR-mediated signaling. Samples or assays comprising a particular GPCR that are treated with a potential agonist or other modulator are compared to control samples without the agonist or other modulator to examine the extent of modulation. Control samples can be assigned a relative activity value for the particular GPCR of 100%. Agonist activity on a particular GPCR is achieved when the G protein-coupled receptor activity value relative to the control is at least about 110%, optionally about 150%, preferably about 200-500%, or about 1000-3000% or higher. Down-modulation (for example by an antagonist) of a particular GPCR is achieved when the particular GPCR activity value relative to the control is at most about 90%, typically about 80%, optionally about 50% or about 25-0% of the 100% value.

[36] "Aggregate," see Complex.

[37] "Algorithm" refers to a detailed sequence of actions to perform to accomplish some task. In computer programming, refers to instructions given to the computer.

[38] "Allele" or "allelic sequence" indicates an alternative form of the gene encoding the GPCR. Alleles may result from at least one mutation in the nucleic acid sequence and may
5 result in altered mRNAs or in polypeptides whose structure or function may or may not be altered. Any given natural or recombinant gene may have none, one, or many allelic forms. Common mutational changes that give rise to alleles are generally ascribed to natural deletions, additions, or substitutions of nucleotides. Each of these types of changes may occur alone or in combination with the others, one or more times in a given sequence.

[39] "Altered" nucleic acid sequences encoding the GPCR include those sequences with
10 deletions, insertions, or substitutions of different nucleotides, resulting in a polynucleotide encoding the same GPCR or a polypeptide variant with at least one substantial structural or functional characteristic of the GPCR. Included within this definition are polymorphisms that may or may not be readily detectable using a particular oligonucleotide probe against the
15 polynucleotide encoding the GPCR. "Altered" proteins may contain deletions, insertions, or substitutions of amino acid residues that produce a silent change and result in a functionally equivalent GPCR. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, or the amphipathic nature of the residues, as long as the biological or immunological activity of the GPCR is
20 retained. For example, negatively charged amino acids may include aspartic acid and glutamic acid, positively charged amino acids may include lysine and arginine, and amino acids with uncharged polar head groups having similar hydrophilicity values may include leucine, isoleucine, and valine; glycine and alanine; asparagine and glutamine; serine and threonine; and phenylalanine and tyrosine.

[40] "Alternative splicing" refers to different ways of cutting and assembling exons to
25 produce mature mRNAs.

[41] "Amino acid" refers generally to any of a class of organic compounds that contains at least one amino group, $-NH_2$, and one carboxyl group, $-COOH$. The alpha-amino acids, $RCH(NH_2)COOH$, are the building blocks from which proteins are typically constructed.

Amino acid can also refer to artificial chemical analogues or mimetics of a given amino acid
30 as described, depending on the context.

[42] "Amino acid sequence" refers to a string of amino acids, such as an oligopeptide, peptide, polypeptide, or protein sequence, or a fragment of any of these, including naturally occurring or synthetic molecules and those comprising an artificial chemical analogue or mimetic of a given amino acid. In this context, "biologically active fragments," "biologically functional fragments," "immunogenic fragments," and "antigenic fragments" refer to fragments of the GPCR that are preferably about 15, 25, or 50 or more amino acids in length and that retain a substantial amount of such activity of the GPCR. Where "amino acid sequence" refers to an amino acid sequence of a naturally occurring protein molecule, "amino acid sequence" and like terms are not necessarily limited to the complete native amino acid sequence associated with the recited protein molecule.

[43] "Amplification" indicates the production of additional copies of something, such as a nucleic acid sequence. Amplification can be generally carried out using polymerase chain reaction (PCR) technologies or other technologies such as the cycling probe reaction (CPR) that are well known in the art. *See, e.g.*, Dieffenbach, C. W. and G. S. Dveksler, PCR Primer, a Laboratory Manual, pp.1-5, Cold Spring Harbor Press, Plainview, N.Y. (1995); U.S. Patents Nos. 5,660,988, 5,731,146 and 6,136,533.

[44] "Amplification primers" are oligonucleotides such as natural, analog or artificially created nucleotides that can serve as the basis for the amplification of a selected nucleic acid sequence. They include, for example, both PCR primers and ligase chain reaction oligonucleotides.

[45] "Analog" or "variant" indicates a GPCR or antigenic peptide that has been modified by deletion, addition, modification, or substitution of one or more amino acid residues compared to the wild-type sequence. Analogs encompass allelic and polymorphic variants, and also muteins and fusion proteins that comprise all or a significant part of such GPCR, *e.g.*, covalently linked via side-chain group or terminal residue to a different protein, polypeptide, or moiety (fusion partner). Variants of a particular GPCR protein refer to an amino acid sequence that is altered by one or more amino acids, for example by one or more amino acid substitution, insertion, deletion or modification, or proteins with or without associated native-pattern glycosylation. The variant may have "conservative" changes. Such "conservative" changes generally are well known in the art and readily determinable for a particular GPCR in view of the present application. Conservative changes include, for example, substitutions where a substituted amino acid has similar structural or chemical

properties to the amino acid it replaced (*e.g.*, negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine, arginine, histidine, asparagine, and glutamine; amino acids containing sulfur include methionine and cysteine; polar hydroxy amino acids include serine, threonine, and tyrosine; large hydrophobic amino acids include phenylalanine and tryptophan; small hydrophobic amino acids include alanine, leucine, isoleucine, and valine). A variant may also have "**nonconservative**" changes which means that the replacement amino acid provides some substantial change in the amino sequence.

[46] A variant preferably retains at least about 90% identity, and more preferably at least about 95% identity. Within certain embodiments, such variants contain alterations such that the ability of the variant to induce an immunogenic response is not substantially eliminated; in some embodiments the ability to an immunogenic response is not substantially diminished. Modifications of amino acid residues may include but are not limited to aliphatic esters or amides of the carboxyl terminus or of residues containing carboxyl side chains, O-acyl derivatives of hydroxyl group-containing residues, and N-acyl derivatives of the amino-terminal amino acid or amino-group containing residues, *e.g.*, lysine or arginine. Guidance in determining which and how many amino acid residues may be substituted, inserted, deleted or modified without diminishing immunological or biological activity may be found in view of the present application using any of a variety of methods and computer programs known in the art, for example, DNASTAR software. Properties of a variant may generally be evaluated by assaying the reactivity of the variant with, for example, antibodies as described herein or evaluating a biological activity characteristic of the native protein as described herein or as known in the art in view of the present application. Certain polynucleotide variants are capable of hybridizing under appropriately stringent conditions to a naturally occurring DNA sequence encoding a particular GPCR protein (or a complementary sequence). Such hybridizing nucleic acid sequences are also within the scope of this invention.

[47] "**Antagonist**" refers to a molecule which interacts with a particular GPCR, for example by binding to the particular GPCR, and prevents, inactivates, decreases or shortens the amount or the duration of the effect of the biological activity of the GPCR. Antagonists include proteins, nucleic acids, carbohydrates, antibodies, or any other molecules that so affect the GPCR. Antagonists can be identified, for example, using appropriate screens

corresponding to those described for agonists above and elsewhere herein or as would be apparent to those skilled in the art in view of the present application.

[48] "Antibody" indicates one type of binding partner, typically encoded by an immunoglobulin gene or immunoglobulin genes, and refers to, for example, intact
5 monoclonal antibodies (including agonist and antagonist antibodies), polyclonal antibodies, phage display antibodies, and multispecific antibodies (*e.g.*, bispecific antibodies) formed, for example, from at least two intact antibodies. Antibody also refers to fragments thereof, which comprise a portion of an intact antibody, generally the antigen-binding or variable region of the intact antibody that are capable of binding the epitopic determinant. Examples
10 of antibody fragments include Fab, Fab', F(ab')₂, and Fv fragments, diabodies, linear antibodies, single-chain antibody molecules, and multispecific antibodies formed from antibody fragments. See US Patent No. 6,214,984. Antibody fragments may be synthesized by digestion of an intact antibody or synthesized *de novo* either chemically or utilizing recombinant DNA technology. Antibodies according to the present invention have at least
15 one of adequate specificity, affinity and capacity to perform the activities desired for the antibodies. Antibodies can, for example, be monoclonal, polyclonal, or combinatorial. Antibodies that bind GPCR polypeptides can be prepared using intact polypeptides or using fragments containing small peptides of interest as the immunizing antigen. The polypeptide or oligopeptide used to immunize an animal (*e.g.*, a mouse, a rat, or a rabbit) can be derived
20 from the translation of RNA, or synthesized chemically, and can be conjugated to a carrier protein if desired. Commonly used carriers that are chemically coupled to peptides include bovine serum albumin, thyroglobulin, and keyhole limpet hemocyanin (KLH). The coupled peptide is then used to immunize the animal.

[49] "Antigenic determinant" refers to the antigen recognition site on an antigen (*i.e.*,
25 epitope). Such antigenic determinant may also be immunogenic.

[50] "Antisense" refers to any composition containing a nucleic acid sequence that is complementary to a specific nucleic acid sequence. "Antisense strand" refers to a nucleic acid strand that is complementary to the "sense" strand. Antisense molecules may be produced by any method including transcription or synthesis including synthesis by ligating
30 the gene(s) of interest in a reverse orientation to a desired promoter that permits the synthesis of a complementary strand. Once introduced into a cell, the complementary nucleotides can combine with natural sequences produced by the cell to form duplexes and to block either

transcription or translation. The designation "negative" can refer to the antisense strand, and the designation "positive" can refer to the sense strand.

[51] **"Biologically active" or "biologically functional,"** when referring to an antigenic peptide, indicates that the antigenic peptide induces an immunogenic response specific for the antigenic peptide and thus for the GPCR from which it was obtained. A variant, fragment, etc., of an antigenic peptide is "biologically active" or "biologically functional" if the ability to induce the specific immunogenic response is not substantially diminished. The term "not substantially diminished" means retaining a functionality that is at least about 90% of the functionality of the native antigenic peptide. Appropriate assays designed to evaluate such functionality may be designed based on existing assays known in the art in view of the present application, or on the representative assays provided herein.

[52] **"Annotation"** refers to the provision of helpful or identifying information about a GPCR or other open reading frame (ORF), such as locus name, key words, and Medline references.

[53] **"BLAST"** refers to the Basic Local Alignment Search Tool, which is a technique for detecting ungapped sub-sequences that match a given query sequence. BLAST can be used as a preliminary step for detecting ORF boundaries.

[54] **"BLASTP"** refers to a BLAST program that compares an amino acid query sequence against a protein sequence database.

[55] **"BLASTX"** refers to a BLAST program that compares the six-frame conceptual translation products of a nucleotide query sequence (both strands) against a protein sequence database. BLASTX can be used to create a sub-database of ORFs which may exist on a contig, and to identify the best match between one of these ORFs and a sequence in an external database.

[56] **"Buffer"** refers to a component in a solution to provide a buffered solution that resists changes in pH by the action of its acid-base conjugate components.

[57] **"CDS"** refers to the GenBank DNA sequence entry for coding sequence. A coding sequence is a sub-sequence of a DNA sequence that is surmised to encode a gene. A complete gene coding sequence begins with an "ATG" and ends with a stop codon.

[58] **"Clone"** in molecular biology refers to a vector carrying an insert DNA sequence.

[59] **"Cloning"** in molecular biology refers to a recombinant DNA technique used to produce multiple, up to millions or more, copies of a DNA sequence. The DNA sequence is

inserted into a small carrier or vector (*e.g.*, plasmid, bacteriophage, or virus) and inserted into a host cell for amplification or expression.

[60] **"Cluster"** refers to a group of ORFs related to one another by sequence homology. Clusters are generally determined by a specified degree of homology and overlap (*e.g.*, a stringency).

[61] **"Comparison window"** indicates a segment of any one of the number of contiguous positions selected from the group consisting of from 20 to 600, usually about 50 to about 200, more usually about 100 to about 150 in which a sequence may be compared to a reference sequence of the same number of contiguous positions after the two sequences are aligned to enhance sequence similarity. Methods of alignment of sequences for comparison will be readily apparent to a person of ordinary skill in the art in view of the present application.

[62] **"Complementary"** or **"complementarity"** refers to the natural binding of polynucleotides by base pairing. For example, the sequence "A-G-T" binds to the complementary sequence "T-C-A." Complementarity between two single-stranded molecules may be "partial," such that only some of the nucleic acids bind, or it may be "complete," such that all of the nucleotides of at least one of the single-stranded molecules binds to corresponding nucleotides of the other single-stranded molecule. The degree of complementarity between nucleic acid strands has significant effects on the efficiency and strength of the hybridization between the nucleic acid strands. This can be of particular importance in amplification reactions, which can depend upon binding between nucleic acids strands, and in the design and use of peptide nucleic acid (PNA) molecules.

[63] **"Complex,"** or **"aggregate,"** indicates a dimer or multimer formed between at least two proteins or other macromolecules, for example a GPCR and its ligand.

[64] **"Composition"** indicates a combination of multiple substances into a mixture.

[65] **"Composition comprising a given amino acid sequence"** refers broadly to any composition containing the given amino acid sequence. The composition may comprise a dry formulation, an aqueous solution, or a sterile composition.

[66] **"Consensus sequence"** refers to the sequence that reflects the most common choice of base or amino acid at each position from a series of related DNA, RNA, or protein sequences. Areas of particularly good agreement often represent conserved functional domains. The generation of consensus sequences has typically been subjected to intensive mathematical analysis.

[67] "Conservative changes" to an amino acid sequence, see Analog.

[68] "Deletion" refers to a change in the amino acid or nucleotide sequence that results in the absence of one or more amino acid residues or nucleotides.

[69] "Derivative" refers to chemical modification of an antigenic peptide, or of an antibody specific for and created from the antigenic peptide. A derivative peptide can be modified, for example, by glycosylation or pegylation.

[70] "Diabodies" refers to one type of antibody comprising small antibody fragments with two antigen-binding sites, which fragments comprise a heavy-chain variable domain (V_H) connected to a light-chain variable domain (V_L) on the same polypeptide chain (V_H - V_L). By using a linker that is too short to allow pairing between the two domains on the same chain, the domains pair with the complementary domains of another chain and create two antigen-binding sites. Diabodies are described, for example, in EP 404,097; WO 93/11161; and Holliger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993).

[71] "Database" refers to a structured format for organizing and maintaining information or data, a collection of data records, in a computer-readable form that can be rapidly and easily retrieved. A database is typically stored in a computer-readable memory. Records may comprise web pages, graphics, audio files, text files, or links. Records may or may not be further broken into fields. Database records are usually indexed and come with a search interface to find records of interest.

[72] "E-value" refers to a result of a FASTA analysis. The number indicates the probability that a match between two sequences is due to random chance.

[73] "Expression vector" is a specialized vector constructed so that the gene inserted in the vector can be expressed in the cytoplasm of a host cell.

[74] "FASTA" refers to a modular set of sequence comparison programs used to compare an amino acid or DNA sequence against all entries in a sequence database. FASTA was written by Professor William Pearson of the University of Virginia Department of Biochemistry. The program uses the rapid sequence algorithm described by Lipman and Pearson (1988) and the Smith-Waterman sequence alignment protocol. FASTA performs a protein to protein comparison.

[75] "FASTX" refers to a module of the FASTA protocol used to define optimal ORF boundaries while searching for genes. FASTX uses a nucleotide to protein sequence comparison.

[76] "Fragment," see Portion.

[77] "GenBank" refers to a family of public databases comprising nucleic acid and amino acid sequence information, including the GenPept bacterial peptide database.

[78] "Gene" refers to the basic unit of heredity that carries the genetic information for a given RNA or protein molecule. A gene is composed of a contiguous stretch of DNA and contains a coding region that is flanked on each end by regions that are transcribed but not translated. A gene is a segment of DNA involved in producing a biologically active or biologically functional polypeptide chain.

[79] "Heterologous" indicates a nucleic acid that comprises two or more subsequences that are not found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences from unrelated genes arranged to make a new functional nucleic acid, *e.g.*, a promoter from one source and a coding region from another source. Similarly, a heterologous protein indicates that the protein comprises two or more subsequences that are not found in the same relationship to each other in nature (*e.g.*, a fusion protein).

[80] "Hit Threshold" refers to a pre-set E-value or P-value for evaluating sequence matches. For example, this value can be set at $1e-6$ for finding genes; and at $1e-15$ for clustering genes.

[81] "Homology" refers to a degree of complementarity. There may be partial homology or complete homology. The word "identity" may substitute for the word "homology." A partially complementary sequence that at least partially, and substantially, inhibits a corresponding sequence from hybridizing to a target nucleic acid is referred to as "substantially homologous." The inhibition of hybridization of the completely complementary sequence to the target sequence may be examined using a hybridization assay (*e.g.*, Southern or Northern blot, *in situ* hybridization, solution hybridization) under conditions of reduced stringency. A substantially homologous sequence or hybridization probe will compete for and inhibit the binding of a completely homologous sequence to the target sequence under stringency conditions that inhibit non-specific binding but permit specific binding. The absence of non-specific binding may be tested by the use of a second target sequence which lacks even a partial degree of complementarity (*e.g.*, less than about 30% homology or identity). In the absence of non-specific binding, the substantially

homologous sequence or probe will not hybridize to the second, non-complementary target sequence.

[82] **"Humanized antibody"** refers to antibody molecules in which the amino acid sequence in the non-antigen-binding regions has been altered so that the antibody more closely resembles a human antibody, and still retains its original binding ability. Typically, humanized antibodies are human immunoglobulins (recipient antibody) in which residues from a complementarity-determining region (CDR) of the recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of the human immunoglobulin are replaced by corresponding non-human residues. Furthermore, humanized antibodies may comprise residues that are found neither in the recipient antibody nor in the imported CDR or framework sequences. These modifications are typically made to further refine and optimize antibody performance. In general, the humanized antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin sequence. The humanized antibody optimally also will comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human immunoglobulin. For further details see, *e.g.*, Jones et al., *Nature*, 321:522-525 (1986); Reichmann et al., *Nature*, 332:323-329 (1988); and, Presta, *Curr. Op. Struct. Biol.*, 2:593-596 (1992).

[83] **"Identity,"** see Homology.

[84] **"Immunocytochemistry"** refers to the use of immunologic methods, including a specific antibody, to study cell constituents.

25 [85] **"Immunohistochemistry"** refers to the use of immunologic methods, including a specific antibody, to study specific antigens in tissue slices.

[86] **"Immunolocalization"** refers to the use of immunologic methods, including a specific antibody, to locate molecules or structures within cells or tissues.

[87] **"Immunologically active"** refers to the capability of a natural, recombinant, or synthetic GPCR, or any immunogenic fragment thereof, to induce a specific immune response in appropriate animals or cells and to bind with specific antibodies. A polypeptide is "immunologically active" if it is recognized by (*e.g.*, specifically bound by) a B-cell or T-

cell surface antigen receptor. Immunological activity may generally be assessed using well known techniques, such as those summarized in Paul, *Fundamental Immunology*, 3rd ed., 243-247, Raven Press (1993) and references cited therein. Such techniques include screening polypeptides derived from the native polypeptide for the ability to react with antigen-specific antisera or T-cell lines or clones, which may be prepared in view of the present application using well known techniques. Preferably, an immunologically active portion of a GPCR protein reacts with such antisera or T-cells at a level that is not substantially lower than the reactivity of the full-length polypeptide (*e.g.*, in an ELISA or T-cell reactivity assay). Such screens may generally be performed using methods well known to those of ordinary skill in the art in view of the present application, such as those described in Harlow and Lane, *Antibodies: A Laboratory Manual*, Cold Spring Harbor Press (1988). B-cell and T-cell epitopes may also be predicted via computer analysis.

[88] "Immune response" refers to any of the body's immunologic reactions to an antigen such as antibody formation, cellular immunity, hypersensitivity, or immunological tolerance.

[89] "Insertion" and "addition" when referring to a change in a nucleotide or amino sequence indicate the addition of one or more nucleotides or amino acid residues, respectively, to the sequence.

[90] "*In situ* hybridization" refers to use of a nucleic acid probe, typically a DNA or RNA probe, to detect the presence of a DNA or RNA sequence in target cells such as cloned bacterial cells, cultured eukaryotic cells, or tissue samples. *In situ* hybridization can also be used for locating genes on chromosomes. The process can be performed by preparing a microscope slide with cells in metaphase of mitosis, then treating slide with a weak base to denature the DNA. Next, pour radioactively labeled probe onto the slide under hybridizing conditions, expose the slide to a photographic emulsion for a suitable period such as a few days or weeks, then develop the emulsion.

[91] "Isoform" refers to different forms of a protein that may be produced from different genes or from the same gene by alternative RNA splicing.

[92] "Isolated" generally means that the material is removed from its original environment (*e.g.*, the natural environment if it is naturally occurring).

[93] "Library" refers physically to a pool of nucleic acid fragments that has been propagated in a cloning vector. Library can also refer to an electronic collection of genomic

or proteomic sequence data, including raw sequences, contigs, ORFs and loci from a specific organism.

[94] "Ligand" refers to an ion or molecule that binds with another molecule, such as a GPCR, to form a macromolecule such as a receptor-ligand complex. An "endogenous
5 ligand" refers to a native ligand that binds to the receptor of the GPCR and modulates biological activity or functionality of the GPCR in its native environment. A "specific ligand" is a ligand able to bind to a particular GPCR and modulate the biological activity or functionality of the particular GPCR; an endogenous ligand is one example of a specific ligand.

10 [95] "Microarray" refers to an array of distinct nucleic acid or amino acid molecules arrayed on a substrate, such as paper, nylon or any other type of membrane, filter, chip, glass slide, or any other suitable solid support. Microarrays can also refer to tissue microarrays, composed of small tissue pieces arranged on a slide. U.S. Pat. No. 5,143,854 and PCT Patent Publication Nos. WO 90/15070 and 92/10092.

15 [96] "Mimetic" refers to a molecule, *e.g.*, a peptide or non-peptide agent, such as a small molecule, that is able to perform the same biological activity as a certain biologically active agent. For example, some mimetics are molecules comprising the same biological function or activity as the particular GPCR. The structure of the mimetic can be developed from knowledge of the structure of the particular GPCR or portions thereof. For appropriate
20 mimetics, the mimetic is able to effect some or all of the actions of a given antigenic peptide or antibodies against the antigenic peptide. Such mimetics can be made, in view of the present application, using techniques well known in the art, *see, e.g.*, U.S. Patent Nos. 6,197,752; 6,093,697; 6,207,643; 5,849,323, and can be included in the various processes, methods, and systems, etc., described herein, such as databases, binding partner assays,
25 probes, medicaments, and therapeutics.

[97] "Modulate" refers to controllably changing the activity of a substance or other item, such as the biological activity of a GPCR, antigenic peptide or corresponding antibody. For example, modulation may cause an increase or a decrease in protein activity, binding characteristics, or other biological, functional, or immunological properties of the GPCR.

30 [98] "Monoclonal antibody" refers to an antibody obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present

in minor amounts. Monoclonal antibodies include "chimeric" antibodies (immunoglobulins) in which a portion of the heavy or light chain is identical with or homologous to corresponding sequences in antibodies derived from a particular species or belonging to a particular antibody class or subclass, while the remainder of the chain(s) is identical with or homologous to corresponding sequences in antibodies derived from another species or belonging to another antibody class or subclass, as well as fragments of such antibodies, so long as they exhibit the desired biological activity. U.S. Pat. No. 4,816,567; Morrison et al., P.N.A.S. USA, 81:6851-6855 (1984). Monoclonal antibodies are highly specific, being directed against a single antigenic site. As a matter of distinction, polyclonal antibody preparations typically include different antibodies directed against different determinants (epitopes) of a target antigen whereas each monoclonal antibody is directed against a single determinant on the antigen. Monoclonal antibodies can be synthesized by hybridoma culture, uncontaminated by other immunoglobulins. For example, the monoclonal antibodies to be used in accordance with the present invention may be made by the hybridoma method first described by Kohler and Milstein, *Nature*, 256:495 (1975), or may be made by recombinant DNA methods. *See, e.g.*, U.S. Pat. No. 4,816,567. Monoclonal antibodies may also be isolated from phage antibody libraries using the techniques described in Clackson et al., *Nature*, 352:624-628 (1991), and Marks et al., *J. Mol. Biol.*, 222:581-597 (1991), for example. The modifier "monoclonal" indicates the character of the antibody as being obtained from a substantially homogeneous population of antibodies, and is not to be construed as requiring production of the antibody by any particular method.

[99] "Nonconservative" changes to an amino acid sequence, see Analog.

[100] "Northern blotting" or "Northern analysis" refers to a method used to detect specific RNA sequences. For example, the process can be performed by electrophoresing RNA in a denaturing agarose gel, transferring the gel onto a membrane, and hybridizing with a labeled RNA or DNA probe.

[101] "Nucleic acid sequence" refers to a polymer comprising a string of "nucleic acids" such as an oligonucleotide, or a polynucleotide or fragment thereof. The nucleic acid sequence can be from DNA or RNA of genomic or synthetic origin, may be single-stranded or double-stranded, and may represent the sense or the antisense strand. A nucleic acid sequence can also be a PNA or a DNA-like or RNA-like material. Unless stated otherwise,

the term encompasses nucleic acids containing known analogues or mimetics of natural nucleotides that have similar binding properties as the reference nucleic acid.

[102] **"Oligonucleotide"** refers to a nucleic acid sequence, generally between 6 nucleotides to 60 nucleotides, preferably about 15 to 30 nucleotides, and most preferably about 20 to 25 nucleotides, that can, for example, be used in PCR or other nucleic acid amplification or in a hybridization assay or microarray. "Oligonucleotide" includes "amplimers," "primers," "oligomers," and "probes," as these terms are commonly defined in the art. Oligonucleotides can be chemically synthesized. Such synthetic oligonucleotides may have no 5' phosphate and if so will not ligate to another oligonucleotide without adding a phosphate, typically by using an ATP in the presence of a kinase. A synthetic oligonucleotide will ligate to a fragment that has not been dephosphorylated.

[103] **"Operably linked"** or **"operably connected"** indicates that one element of an apparatus, system, or method, etc., is connected to another element of the apparatus, system, or method, etc., such that the two elements are able to perform their intended purposes. For example, when a promoter is linked to a polynucleotide to allow transcription of the polynucleotide, it is "operably linked" to the polynucleotide.

[104] **"Orphan receptor"** refers to a receptor for which the endogenous ligand or other ligands inducing biological activity are not known.

[105] **"PCR"** or **"polymerase chain reaction"** refers to an *in vitro* method that uses oligonucleotide primers, enzymes, and a series of repetitive temperature cycles to generate millions of copies of a nucleic acid, typically DNA, from an original specimen of a specific DNA sequence, which specimen may be present only in a trace amount.

[106] **"Plasmids"** refers to extrachromosomal genetic elements composed of DNA or RNA found in both eukaryotic and prokaryotic cells that can propagate themselves autonomously in cells. Plasmids can be used as carriers or vectors to clone DNA molecules. They are designated by a lower case p preceded or followed by capital letters or numbers. The starting plasmids herein are either commercially available, publicly available on an unrestricted basis, or can be constructed from available plasmids in accord with published procedures. In addition, equivalent plasmids to those described are known in the art and will be apparent to the ordinarily skilled artisan in view of the present application.

[107] **"Polynucleotide encoding a polypeptide"** indicates a polynucleotide that includes only the coding sequence for the polypeptide as well as polynucleotides that include additional coding or non-coding sequence.

[108] **"Portion" or "fragment"** with regard to a protein (as in "a portion of a given protein") refers to parts of that protein, a subsequence of the complete amino acid sequence of the receptor containing at least about 8, usually at least about 12, more typically at least about 20, and commonly at least about 30 or more contiguous amino acid residues, up to the entire amino acid sequence minus one amino acid. Thus, a protein "comprising at least a portion of the amino acid sequence of SEQ ID NO:XX" or a protein "comprising at least a portion of the amino acid sequence of a particular GPCR" encompasses the full-length protein and fragments thereof. A portion or fragment of a nucleic acid refers to nucleic acid sequences that are greater than about 12 nucleotides in length, and typically at least about 60 or 100 nucleotides, generally at least about 1000 nucleotides, or at least about 10,000 nucleotides in length, up to the entire nucleic acid sequence minus one nucleic acid.

[109] **"P-value"** is a statistical term used to indicate the probability that an event is due to random chance. When used in reference to a result of BLAST searches, the number indicates the probability that a match between two sequences is due to random chance.

[110] **"Receptor"** refers to a molecular structure, typically within a cell or on a cell surface, that selectively binds a specific substance (a ligand) and a specific physiologic effect that accompanies the binding. GPCRs are a type of cell-surface receptor, which means a protein in, on, or traversing the cell membrane (in the case of GPCRs, traversing the cell membrane) that recognizes and binds to specific molecules in the surrounding fluid. The binding to a receptor may serve to transport molecules into the cell's interior or to signal the cell to respond in some way.

[111] **"Recombinant"** refers to both a method of production and a structure. Some recombinant nucleic acids and proteins are made by the use of recombinant DNA techniques that involve human intervention, either in manipulation or selection. Others are made by fusing two fragments that are not naturally contiguous to each other. Engineered vectors are encompassed, as well as nucleic acids comprising sequences derived using any synthetic oligonucleotide process.

[112] **"Sample"** is used in its usual broad sense. For example, a biological sample suspected of containing nucleic acids encoding the GPCR, or fragments thereof, or the GPCR

itself, may comprise a bodily fluid; an extract from a cell, chromosome, organelle, or membrane from a cell; a cell; genomic DNA, RNA, or cDNA (in solution or bound to a solid support); a tissue; a tissue print, and the like. Biological sample refers to samples from a healthy individual as well as to samples from a subject suspected of having or susceptible to having, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[113] "Second messengers" refer to intracellular signaling molecules such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or Ca^{2+} . Second messengers, in turn, alter the

activity of other intracellular proteins such as cAMP-dependent protein kinase and Ca^{2+} /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal.

[114] "Southern blotting" refers to a method for detecting specific DNA sequences via hybridization. For example, a DNA sample can be electrophoresed in a denaturing agarose gel, transferred onto a membrane, and hybridized with a complementary nucleic acid probe. "Southern" when used in reference to a database indicates an electronic analog of the laboratory technique, which analysis can be used to identify libraries in which a given DNA sequence, such as a gene, EST, or ORF is present. The terms "Northern" and "Western" likewise can be used for electronic analogs to the respective laboratory techniques described above.

[115] "Specific binding" or "specifically binding" refers to an interaction between protein or peptide and a certain substance, such as its specific ligand or antibody, and in some cases its agonists or antagonists. The interaction is dependent upon the presence of a particular structure of the protein recognized by the binding molecule (e.g., the antigenic determinant or epitope). For example, if an antibody specifically binds epitope "A," the presence of a polypeptide containing epitope A or the presence of free unlabeled epitope A will reduce the amount of labeled epitope A that binds to the antibody in a reaction containing free labeled epitope A and the antibody. Conversely, the presence of a polypeptide that does not contain epitope A will not reduce the amount of labeled epitope A that binds to the antibody. Highly specific binding indicates that the protein or peptide binds to its particular ligand, antibody, etc., and does not bind in a significant amount to other proteins present in the sample. Typically, a specific or selective reaction will be at least twice the background signal or noise and more typically more than 10 to 100 times the background signal or noise.

[116] "Stringent conditions" refer to conditions that permit hybridization between complementary polynucleotide sequences. Suitably stringent conditions can be defined by, for example, the concentrations of salt or formamide in the prehybridization and hybridization solutions, or by the hybridization temperature. Stringency can be increased by reducing the concentration of salt, increasing the concentration of formamide, or raising the hybridization temperature. Stringent conditions are dependent upon the type of probe as well as the length of the probe and the GC content of the probe. "Stringent conditions" typically

occur within a range from about $T_m - 5^\circ\text{C}$ (5°C below the melting temperature (T_m) of the probe) to about $T_m - 20 - 25^\circ\text{C}$ for a cRNA probe and to about $T_m - 15^\circ\text{C}$ for an oligonucleotide probe. "**Highly stringent conditions**" refers to conditions under which a probe will hybridize to its target sequence, typically in a complex mixture of nucleic acid sequences, but
5 will not substantially hybridize to other sequences. One example of high stringency conditions for a cRNA probe that is 1,000 nucleotides in length and has a GC content of about 60% is about $55 - 65^\circ\text{C}$ in 50% formamide, 0.1 X SSC, and 200 $\mu\text{g/ml}$ sheared and denatured salmon sperm DNA. One example of low stringency conditions for the same probe in 50% formamide, 0.1 X SSC, and 200 $\mu\text{g/ml}$ sheared and denatured salmon sperm
10 DNA would be $30 - 35^\circ\text{C}$. "**Very highly stringent conditions**" indicates that there must be complete identity between the sequences. The temperature range corresponding to a particular level of stringency can be narrowed further by calculating the purine to pyrimidine ratio of the nucleic acid of interest and adjusting the temperature accordingly. Variations on and modifications of the above ranges and conditions will be readily appreciated by those of
15 skill in the art in view of the present application. As will be understood by those of skill in the art in view of the present application, the stringency of hybridization can be altered to identify or detect identical or related polynucleotide sequences. One guide for nucleic acid hybridization is Tijssen, Laboratory Techniques in Biochemistry and Molecular Biology-v.24 Hybridization with Nucleic Acid Probes, Part I "Overview of principles of hybridization and the strategy of nucleic acid assays" (New York: Elsevier 1993).
20 [117] "**Substantially purified**" refers to nucleic acid or amino acid sequences that are removed from their natural environment and are separated from other components from such natural environment, and are at least about 60% free, preferably about 75% or 85% free, and most preferably about 90%, 95% or 99% free from such other components with which they
25 are naturally associated. Substantially purified preferably indicates a substantially homogeneous state and can be in either a dry or aqueous solution or other composition as desired. Purity and homogeneity can be assayed by standard methods, for example on a mass or molar basis, using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid chromatography.

[118] "Substitution" when referring to a change in a nucleotide or amino sequence indicates the replacement of one or more nucleotides or amino acids by different nucleotides or amino acids, respectively.

[119] "Variant," see Analog.

5 [120] "Western blotting" or "Western analysis" refers to a method for detecting specific protein sequences. For example, the process can be performed by electrophoresing a protein mixture in a denaturing agarose or acrylamide gel, transferring the mixture onto a membrane, and incubating it with an antibody raised against the protein of interest.

[121] Other terms and phrases are defined in other portions of this application.

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C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRs AND OTHER POLYPEPTIDES

[122] The present invention provides improved antigenic peptides, for example as set forth in Figure 2, SEQ ID NOS. 692-2292, and improved methods of identifying such
15 antigenic peptides from known or publicly available sequences of polypeptides or proteins, i.e., from a candidate polypeptide sequence. Polypeptide and protein are used in their traditional sense to indicate lengthy amino acid molecules, whereas the antigenic peptide has a length significantly less than the length of the corresponding polypeptide or protein such that the antigenic peptide is capable of providing significantly improved antigenicity relative
20 to the corresponding polypeptide or protein, typically improved specificity, affinity or avidity. The candidate polypeptide can be, for example, a human protein or polypeptide, a naturally occurring protein or polypeptide or a synthetic or recombinant protein or polypeptide.

[123] The antigenic peptides are typically 5 to about 100 amino acids in length, preferably
25 6 to about 50 amino acids, and further preferably 7 to about 20 amino acids. The antigenic peptides include short antigenic amino acid sequences (*i.e.*, peptides comprising only a portion of an antigenic sequence as set forth in Figure 2 or as identified using the methods described herein, plus an insignificant number of additional amino acids at one or both ends, where insignificant indicates that the extra amino acids do not substantially interfere with the
30 antigenicity of the antigenic peptide). Such short antigenic peptides can be identical to at least 5, 6, 7 or more consecutive amino acids of the sequences herein or identified using the methods described herein, or can have one or two (or more, with increasing length)

conservative amino acid substitution for antigenic peptides comprising more than 6 or 7 consecutive amino acids of the sequences herein or identified using the methods described herein. Antigenic peptides and sequences, and related antibodies and assays and the like, are discussed further elsewhere herein with regard to GPCRs, but such discussions applies to all antigenic peptides produced according to the methods herein, including proteins and polypeptides such as kinases, phosphatases and any other desired protein or polypeptide.

[124] The identification or selection methods comprise searching the candidate polypeptide sequence using a comparison window of the desired length, then selecting against or rejecting amino acid sequences of the length and having at least 1 characteristic selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, at least 5, 7, 8, or all of the characteristics are selected.

[125] The identification or selection methods can also comprise selecting against amino acid sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide, i.e., some polypeptide other than the candidate polypeptide from which the selected antigen was derived, that is different from the candidate polypeptide, posttranslational modification sites, or highly hydrophobic sequences, which indicates sequences adequately hydrophobic to be located in a lipid membrane such as a cellular membrane. The posttranslational modification sites can be phosphorylation or glycosylation sites.

[126] The methods can further comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence. Exemplary BLAST-type and FAST-type analyses are described above, including BLAST, BLASTP, BLASTX, FASTA, and FASTX.

D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO PARTICULAR GPCRS

[127] ANTIGENIC PEPTIDES GENERALLY:

[128] The present invention includes antigenic peptides able to induce specific immunogenic responses, and corresponding binding partners. Such antigenic peptides and

binding partners can be cloned, expressed, isolated, purified, and otherwise obtained or manipulated according to routine methods known in the art in view of the present application.

[129] The present invention further relates to antigenic peptides having an amino acid sequence from a particular GPCR, including analogs, mimetics, fragments, derivatives, and the like of such antigenic peptides. *See* SEQ ID NOS. 1-2292, Figures 1-3. The antigenic peptides may be recombinant, natural or synthetic. The antigenic peptides include (i) antigenic peptides in which one or more of the amino acid residues are substituted with a conserved or non-conserved amino acid residue (preferably a conserved amino acid residue) and such substituted amino acid residue may or may not be one encoded by the genetic code, (ii) antigenic peptides in which one or more of the amino acid residues includes a substituent group, (iii) antigenic peptides in which the mature polypeptide is complexed (*e.g.*, fused or otherwise bonded) with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol), and (iv) antigenic peptides in which additional amino acids are fused to the antigenic peptide. Preparing and using such analogs, etc., are within the scope of those skilled in the art in view of the present application. The antigenic peptides additionally include antigenic peptides that have at least about 90% identity to the given antigenic peptide, and preferably at least about 95% identity to the antigenic peptide. The antigenic peptides additionally include antigenic peptides that contain at least five, six, seven or more consecutive amino acids that are identical to the given antigenic peptide, as well as antigenic peptides that contain at least six, seven, eight or more consecutive amino acids that are identical to the given antigenic except for one or two conservative changes within this such stretch of amino acids. The antigenic peptides of the present invention can be produced by peptide synthesis.

[130] EXPRESSION PROFILES BASED ON PROTEINS:

[131] An expression profile of a particular GPCR in one or more tissues can be made using antibodies or other binding partners produced using the antigenic peptides herein, then using traditional approaches such as Western blotting, immunohistochemistry analysis, protein array, ligand-binding studies, radioimmunoassay (RIA), and high performance liquid chromatography (HPLC), and immunohistochemistry analysis. H&E staining and other analyses can be used in combination with such immunologically-based analyses.

[132] SCREENING FOR ACTIVITY:

[133] The activity or functionality of an antigenic peptide can be measured using any of a variety of assays known in the art. Similarly, the specificity or affinity of an antibody or other binding partner made using the antigenic peptide can be measured using any of a variety of assays known in the art

5 [134] The activity or functionality of a particular GPCR may be measured using any of a variety of functional assays in which activation of the receptor in question results in an observable change in the level of some second messenger system, including but not limited to adenylyl cyclase, calcium mobilization, arachidonic acid release, ion channel activity, inositol phospholipid hydrolysis, or guanylyl cyclase. Heterologous expression systems utilizing
10 appropriate host cells to express the nucleic acid of the subject invention are used to obtain the desired second messenger coupling. Receptor activity may also be assayed in an oocyte expression system.

[135] **PROTEIN PURIFICATION:**

[136] The antigenic peptides and proteins or polypeptides containing them can be purified
15 by standard methods, including but not limited to salt or alcohol precipitation, preparative disc-gel electrophoresis, isoelectric focusing, high pressure liquid chromatography (HPLC), reversed-phase HPLC, gel filtration, cation and anion exchange, partition chromatography, and countercurrent distribution. Suitable purification methods will be readily apparent to those skilled in the art in view of the present application and are disclosed, *e.g.*, in Guide to
20 Protein Purification, Methods in Enzymology, Vol. 182, M. Deutscher, Ed., Academic Press, New York, NY (1990). Purification steps can be followed as part of carrying out assays for ligand binding activity. Particularly where a particular GPCR is being isolated from a cellular or tissue source, it is preferable to include one or more inhibitors of proteolytic enzymes in the assay system, such as phenylmethylsulfonyl fluoride (PMSF).

25

E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION

1. SYSTEMS AND METHODS FOR SCREENING FOR A
PARTICULAR GPCR OR ANTIGENIC PEPTIDE

30 [137] **SCREENING FOR ANTIGENIC PEPTIDES:**

[138] As noted elsewhere herein, the present invention provides antigenic peptides and antibodies that are specific for a particular GPCR. The invention also provides systems and

methods for using or detecting such peptides, and antibodies against such peptides or corresponding GPCRs in a sample. The assays are based on the detection of the antigenic peptides, typically as they are displayed by the particular GPCR, or the detection of antibodies produced against the particular antigenic peptides and corresponding GPCRs.

5 **[139] SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

[140] Many assays are characterized by the ability of antigenic peptides for a particular GPCR to be bound by antibodies against them, and the ability of antibodies produced against such antigenic peptides to bind to antigens or epitopes of the particular GPCR in a sample. Some exemplary assays are described below and elsewhere herein.

10 **[141] LIST OF ASSAYS:**

[142] A variety of assays can detect antibodies that bind specifically to the desired protein in or from a sample, or detect a desired protein bound to one or more antibodies in or from the sample. Exemplary assays are described in detail in *Antibodies: A Laboratory Manual*, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988). Representative
15 examples of such assays include: countercurrent immuno-electrophoresis (CIEP), radioimmunoassays, radioimmunoprecipitations, enzyme-linked immunosorbent assays (ELISA), dot blot assays, inhibition or competition assays, sandwich assays, immunostick (dip-stick) assays, simultaneous assays, immunochromatographic assays, immunofiltration assays, latex bead agglutination assays, immunofluorescent assays, biosensor assays, and
20 low-light detection assays. See U.S. Pat. Nos. 4,376,110 and 4,486,530; WO 94/25597; WO/25598.

[143] ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):

[144] One assay for the detection of a particular GPCR is a sandwich assay such as an enzyme-linked immunosorbent assay (ELISA). In one preferred embodiment, the ELISA
25 comprises the following steps: (1) coating the particular GPCR antigenic peptide onto a solid phase, (2) incubating a sample suspected of containing anti-particular GPCR antibodies with the antigenic peptide coated onto the solid phase under conditions that allow the formation of an antigen-antibody complex, (3) adding an anti-antibody (such as anti-IgG) conjugated with a label to be captured by the resulting antigen-antibody complex bound to the solid phase,
30 and (4) measuring the captured label and determining therefrom whether the sample contains anti-particular GPCR antibodies.

[145] IMMUNOFLUORESCENCE ASSAY:

[146] A fluorescent antibody test (FA-test) uses a fluorescently labeled antibody able to bind to one of the proteins of the invention. For detection, visual determinations are made by a technician using fluorescence microscopy, yielding a qualitative result. In one embodiment, this assay is used for the examination of tissue samples or histological sections.

5 [147] **BEAD AGGLUTINATION ASSAYS:**

[148] In latex bead agglutination assays, antibodies to one or more of the antigenic peptides of the present invention are conjugated to latex beads. The antibodies conjugated to the latex beads are then contacted with a sample under conditions permitting the antibodies to bind to desired proteins in the sample, if any. The results are then read visually, yielding a
10 qualitative result. In some embodiments, as with certain other assays, this format can be used in the field for on-site testing.

[149] **ENZYME IMMUNOASSAYS:**

[150] Enzyme immunoassays (EIA) include a number of different assays that can use the antibodies described in the present application. For example, a heterogeneous indirect EIA
15 uses a solid phase coupled with an antibody of the invention and an affinity purified, anti-IgG immunoglobulin preparation. The solid phase can be a polystyrene microtiter plate. The antibodies and immunoglobulin preparation are then contacted with the sample under conditions permitting antibody binding, which conditions are well known in the art. The results of such an assay can be read visually or using a device such as a spectrophotometer,
20 such as an ELISA plate reader, to yield a quantitative result. An alternative solid phase EIA format includes plastic-coated ferrous metal beads able to be moved during the procedures of the assay by means of a magnet. Yet another alternative is a low-light detection immunoassay format. In this highly sensitive format, the light emission produced by appropriately labeled bound antibodies are quantified automatically. Preferably, the reaction
25 is performed using microtiter plates.

[151] In an alternative embodiment, a radioactive tracer is substituted for the enzyme-mediated detection in an EIA to produce a radioimmunoassay (RIA).

[152] **SANDWICH ASSAY:**

[153] In a capture-antibody sandwich enzyme assay, the desired protein is bound between
30 an antibody attached to a solid phase, preferably a polystyrene microtiter plate, and a labeled antibody. The results can be measured, for example, using a spectrophotometer, such as an ELISA plate reader.

[154] SEQUENTIAL AND SIMULTANEOUS ASSAYS:

[155] In a sequential assay format, reagents are allowed to incubate with the capture antibody in a stepwise fashion. The test sample is first incubated with the capture antibody. Following a wash step, incubation with the labeled antibody occurs. In a simultaneous assay, the two incubation periods described in the sequential assay are combined. This eliminates one incubation period plus a wash step.

[156] IMMUNOSTICK (DIP-STICK) ASSAYS:

[157] A dipstick/immunostick format is essentially an immunoassay using a polystyrene paddle or dipstick instead of a polystyrene microtiter plate as the solid phase. Reagents are the same and the format can either be simultaneous or sequential.

[158] IMMUNOCHROMATOGRAPHIC ASSAYS:

[159] In a chromatographic strip test format, a capture antibody and a labeled antibody are dried onto a chromatographic strip, which typically comprises nitrocellulose or high porosity nylon bonded to cellulose acetate. The capture antibody is usually spray dried as a line at one end of the strip. At this end, there is an absorbent material that is in contact with the strip. At the other end of the strip, the labeled antibody is deposited in a manner that prevents it from being absorbed onto the membrane. Usually, the label attached to the antibody is a latex bead or colloidal gold. The assay may be initiated by applying the sample immediately in front of the labeled antibody.

[160] IMMUNOFILTRATION ASSAYS:

[161] Immunofiltration/immunoconcentration formats combine a large solid-phase surface with directional flow of sample/reagents, which concentrates and accelerates the binding of antigen to antibody. In an exemplary format, the test sample is preincubated with a labeled antibody, and then applied to a solid phase such as fiber filters, nitrocellulose membranes, or the like. The solid phase can also be precoated with latex or glass beads coated with capture antibody. Detection of analyte is the same as that in a standard immunoassay. The flow of sample/reagents can be modulated by either vacuum or the wicking action of an underlying absorbent material.

[162] BIOSENSOR ASSAYS:

[163] A threshold biosensor assay is a sensitive, instrumented assay amenable to screening large numbers of samples at low cost. In one embodiment, such an assay comprises the use of light-addressable potentiometric sensors wherein the reaction involves

the detection of a pH change due to binding of the desired protein by capture antibodies, bridging antibodies, and urease-conjugated antibodies. Upon binding, a pH change is effected that is measurable by translation into electrical potential (μ volts). The assay typically occurs in a very small reaction volume, and is very sensitive; the reported detection
5 limit of the assay is 1,000 molecules of urease per minute.

2. ANTIBODIES

[164] ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE AND ITS CORRESPONDING GPCR:

10 **[165]** Highly specific, high affinity or antibodies against a particular GPCR or other polypeptide can be generated using the antigenic peptides herein and using antibody generation techniques as described herein or elsewhere. The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR
15 in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected. The antibodies produced using the antigenic peptides of the present invention,
20 for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[166] The antibodies can be used to conduct immunohistochemistry and other analyses of a variety of tissue samples to determine expression of a particular GPCR in such tissues, for
25 diagnostic assays, and for other desired purposes. The specification will now discuss a variety of antibody types, methods, uses, etc.

[167] ANTIBODIES GENERALLY:

[168] In some embodiments, the present invention provides antibodies and other binding partners created using the antigenic peptides herein and directed to a particular GPCR from
30 which the antigenic peptides were derived. Compositions and uses for such antibodies are contemplated, including diagnostic, medicament, and therapeutic uses. Various diagnostic, medicament, and therapeutic uses for antibodies have been reviewed above and, for example,

in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.*, 53:189-204 (1990); Endo, *Nippon Igaku Hoshasen Gakkai Zasshi* (Japan), 50(8):901-909 (1990); and, U.S. Pat. No. 6,214,984.

[169] Recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as myriad immunoglobulin variable region genes. Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of antigenic peptide chains, each pair having one "light" chain (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen recognition. The terms variable light chain (V_L) and variable heavy chain (V_H) refer to these light and heavy chains respectively.

15 [170] **ANTI-IDIOTYPIC ANTIBODIES:**

[171] The present invention encompasses anti-idiotypic antibodies, including polyclonal and monoclonal anti-idiotypic antibodies, that are produced using the antibodies described herein as antigens. These anti-idiotypic antibodies are useful because they may mimic the structures of the antigenic peptides set forth herein.

20 [172] Techniques for producing antibodies, including antibody fragments, include the following.

a. Antibody Preparation

(i) Polyclonal Antibodies

25 [173] **ANTIBODY PREP - POLYCLONAL:**

[174] Polyclonal antibodies are generally raised in animals by multiple subcutaneous (sc) or intraperitoneal (ip) injections of the relevant antigen and an adjuvant. It may be useful to conjugate the relevant antigen to a protein that is immunogenic in the species to be immunized, *e.g.*, keyhole limpet hemocyanin, serum albumin, bovine thyroglobulin, or soybean trypsin inhibitor, using a bifunctional or derivatizing agent, for example, maleimidobenzoyl sulfosuccinimide ester (conjugation through cysteine residues), N-

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hydroxysuccinimide (through lysine residues), glutaraldehyde, succinic anhydride, SOCl_2 , or $\text{R}^1\text{N}=\text{C}=\text{NR}$, where R and R^1 are different alkyl groups.

[175] ANTIBODY PREP – ADJUVANTS (ALL ABS):

[176] Suitable adjuvants for the vaccination of animals for the production of polyclonal, monoclonal, and other antibodies include but are not limited to Adjuvant 65 (containing peanut oil, mannide monooleate, and aluminum monostearate); Freund's complete or incomplete adjuvant; mineral gels such as aluminum hydroxide, aluminum phosphate, and alum; surfactants such as hexadecylamine, octadecylamine, lysolecithin, dimethyldioctadecylammonium bromide, N,N-dioctadecyl-N',N'-bis(2-hydroxymethyl) propanediamine, methoxyhexadecylglycerol, and pluronic polyols; polyanions such as pyran, dextran sulfate, poly IC, polyacrylic acid, and carbopol; peptides such as muramyl dipeptide, dimethylglycine, tuftsin, stress proteins, core-containing proteins from a positive stranded RNA virus, *see* US Pat. No. 6,153,378; and, oil emulsions. The antigenic peptides could also be administered following incorporation into liposomes or other microcarriers.

[177] Information concerning adjuvants and various aspects of immunoassays are disclosed, *e.g.*, in the series by P. Tijssen, Practice and Theory of Enzyme Immunoassays, 3rd Edition (1987), Elsevier, New York. Other useful references covering methods for preparing polyclonal antisera include Microbiology, Hoeber Medical Division, Harper and Row (1969); Landsteiner, Specificity of Serological Reactions, Dover Publications, New York (1962); and, Williams, et al., Methods in Immunology and Immunochemistry, Vol. 1, Academic Press, New York (1967).

[178] Animals can be immunized against the antigen, immunogenic conjugates, or derivatives by combining 1 mg or 1 μg of the peptide or conjugate (for rabbits or mice, respectively) with 3 volumes of Freund's complete adjuvant and injecting the solution intradermally at multiple sites. One month later the animals are boosted with 1/5 to 1/10 the original amount of peptide or conjugate in Freund's complete adjuvant by subcutaneous injection at multiple sites. Seven to 14 days later the animals are bled and the serum is assayed for antibody titer. Animals are boosted until the titer plateaus. Preferably, the animal is boosted with the conjugate of the same antigen, but conjugated to a different protein or through a different cross-linking reagent. Conjugates also can be made in recombinant cell culture as protein fusions. In addition, aggregating agents such as alum can be suitably used to enhance the immune response.

(ii) Monoclonal Antibodies

[179] ANTIBODY PREP - MONOCLONAL:

[180] Monoclonal antibodies are obtained from a population of substantially
5 homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are
identical except for possible naturally occurring mutations that may be present in minor
amounts. For example, monoclonal antibodies can be made using the hybridoma method first
described by Kohler and Milstein, *Nature*, 256:495 (1975), or can be made by recombinant
DNA methods, or otherwise as desired.

10 **[181]** In the hybridoma method, a mouse, or other appropriate host animal, such as a
hamster, is immunized as described herein to elicit lymphocytes that produce or are capable
of producing antibodies that will bind specifically to the antigenic peptide used for
immunization. Alternatively, lymphocytes may be immunized *in vitro*. Lymphocytes then
are fused with myeloma cells using a suitable fusing agent, such as polyethylene glycol, to
15 form a hybridoma cell, Goding, *Monoclonal Antibodies: Principles and Practice*, pp. 59-103,
Academic Press (1986).

[182] The hybridoma cells thus prepared are seeded and grown in a suitable culture
medium that preferably contains one or more substances that inhibit the growth or survival of
the unfused, parental myeloma cells. For example, if the parental myeloma cells lack the
20 enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture
medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine
(HAT medium), which substances prevent the growth of HGPRT-deficient cells.

[183] Preferred myeloma cells are those that fuse efficiently, support stable high-level
production of antibody by the selected antibody-producing cells, and are sensitive to a
25 medium such as HAT medium, for example murine myeloma lines, such as those derived
from MOPC-21 and MPC-11 mouse tumors available from the Salk Institute Cell
Distribution Center, San Diego, CA USA, and SP-2 cells available from the American Type
Culture Collection, Rockville, MD USA. Human myeloma and mouse-human
heteromyeloma cell lines have also been described for the production of human monoclonal
30 antibodies, Kozbor, *J. Immunol.*, 133:3001 (1984); Brodeur et al., *Monoclonal Antibody
Production Techniques and Applications*, pp. 51-63, Marcel Dekker, Inc., New York (1987).

[184] Culture medium in which hybridoma cells are growing is assayed for production of monoclonal antibodies directed against the antigenic peptide. The binding specificity of monoclonal antibodies produced by hybridoma cells can be determined by immunoprecipitation or by an *in vitro* binding assay, such as radioimmunoassay (RIA) or
5 enzyme-linked immunosorbent assay (ELISA). The binding affinity of the monoclonal antibody can, for example, be determined by the Scatchard analysis of Munson and Pollard, Anal. Biochem., 107:220 (1980). The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole,
10 preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[185] After hybridoma cells are identified that produce antibodies of the desired specificity, affinity, or activity, the clones may be subcloned by limiting dilution procedures and grown by standard methods (Goding, *supra*). Suitable culture media for this purpose include, for example, D-MEM or RPMI-1640 medium. In addition, the hybridoma cells may
15 be grown *in vivo* as ascites tumors in an animal.

[186] The monoclonal antibodies secreted by the subclones are suitably separated from the culture medium, ascites fluid, or serum by conventional immunoglobulin purification procedures such as, for example, protein A-SEPHAROSETM, hydroxyapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.

[187] DNA encoding the monoclonal antibodies can be readily isolated and sequenced
20 using conventional procedures (*e.g.*, by using oligonucleotide probes that are capable of binding specifically to genes encoding the heavy and light chains of murine antibodies). The hybridoma cells serve as a preferred source of such DNA. Once isolated, the DNA may be placed into expression vectors, which can then be transfected into host cells such as *E. coli*
25 cells, simian COS cells, Chinese hamster ovary (CHO) cells, or myeloma cells that do not otherwise produce immunoglobulin protein, to obtain the synthesis of monoclonal antibodies in the recombinant host cells. Review articles on recombinant expression in bacteria of DNA encoding antibody include Skerra et al., Curr. Opinion in Immunol., 5:256-262 (1993), and Pluckthun, Immunol. Revs., 130:151-188 (1992).

30 [188] **MOABS - COMBINATORIAL:**

[189] In a further embodiment, antibodies or antibody fragments can be isolated from antibody phage libraries generated using the techniques described in McCafferty et al.,

Nature, 348:552-554 (1990), using the proper antigen such as CD11a, CD18, IgE, or HER-2 to select for a suitable antibody or antibody fragment. Clackson et al., Nature, 352:624-628 (1991) and Marks et al., J. Mol. Biol., 222:581-597 (1991) describe the isolation of murine and human antibodies, respectively, using phage libraries. Subsequent publications describe the production of high affinity (nM range) human antibodies by chain shuffling, Marks et al., Biotechnology, 10:779-783 (1992), as well as combinatorial infection and *in vivo* recombination as strategies for constructing very large phage libraries, Waterhouse et al., Nuc. Acids. Res., 21:2265-2266 (1993). Combinatorial antibodies are also discussed in Huse et al., Science 246:1275-1281 (1989), and Sastry et al., Proc. Natl. Acad. Sci. USA, 86:5728-5732 (1989), and Altling-Mees et al., Strategies in Molecular Biology 3:1-9 (1990). These references describe a system commercially available from Stratacyte, La Jolla, CA USA. Briefly, mRNA is isolated from a B cell population and utilized to create heavy and light chain immunoglobulin cDNA expression libraries in the λ IMMUNOZAP(H) and λ IMMUNOZAP(L) vectors. These vectors may be screened individually or co-expressed to form Fab fragments or antibodies, *see* Huse et al., *supra*; *see also* Sastry et al., *supra*. Positive plaques can subsequently be converted to a non-lytic plasmid, which allows for high-level expression of monoclonal antibody fragments from *E. coli*.

[190] HUMANIZED MOAB:

[191] Binding partners can also be constructed utilizing recombinant DNA techniques to incorporate the variable regions of a gene that encode a specifically binding antibody. The construction of these binding partners can be readily accomplished by one of ordinary skill in the art in view of the present application. *See* Larrick et al., Biotechnology, 7:934-938 (1989); Riechmann et al., Nature, 332:323-327 (1988); Roberts et al., Nature, 328:731-734 (1987); Verhoeyen et al., Science 239:1534-1536 (1988); Chaudhary et al., Nature, 339:394-397 (1989); *see also* U.S. Pat. No. 5,132,405 entitled "Biosynthetic Antibody Binding Sites".) For example, the DNA can be modified by substituting the coding sequence for human heavy- and light-chain constant domains in place of homologous murine sequences, U.S. Pat. No. 4,816,567; Morrison, et al., Proc. Nat. Acad. Sci., 81:6851 (1984), or by covalently joining to the immunoglobulin coding sequence all or part of the coding sequence for a non-immunoglobulin polypeptide. In another example, DNA segments encoding the desired antigen-binding domains specific for the protein or peptide of interest are amplified from appropriate hybridomas and inserted directly into the genome of a cell that produces human

antibodies. *See* Verhoeyen et al., *supra*; *see also* Reichmann et al., *supra*. Some of these techniques transfer the antigen-binding site of a specifically binding mouse or rat monoclonal antibody or the like to a human antibody. Such antibodies can be preferable for therapeutic use in humans because they are typically not as antigenic as rat or mouse antibodies.

- 5 [192] In an alternative embodiment, genes that encode the variable region from a hybridoma producing a monoclonal antibody of interest can be amplified using oligonucleotide primers for the variable region. These primers may be synthesized by one of ordinary skill in the art, or may be purchased from commercially available sources. For instance, primers for mouse and human variable regions including, among others, primers for
- 10 V_HA, V_HB, V_HC, V_HD, C_H1, V_L, and C_L regions are available from Stratacyte (La Jolla, CA). These primers may be utilized to amplify heavy- or light-chain variable regions, which may then be inserted into vectors such as IMMUNOZAPTM(H) or IMMUNOZAPTM(L) (Stratacyte), respectively. These vectors may then be introduced into *E. coli* for expression. Utilizing these techniques, large amounts of a single-chain protein containing a fusion of the
- 15 V_H and V_L domains may be produced, *see* Bird et al., Science 242:423-426 (1988).

[193] ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES (ALL ABS):

- [194] Non-immunoglobulin polypeptides can be substituted in monoclonal and other antibodies described herein for the constant domains of an antibody, or they can be
- 20 substituted for the variable domains of one antigen-combining site of an antibody to create a chimeric bivalent antibody comprising one antigen-combining site having specificity for an antigen and another antigen-combining site having specificity for a different antigen.

[195] CHIMERICS:

- [196] Chimeric or hybrid antibodies can also be prepared *in vitro* using known methods in
- 25 synthetic protein chemistry, including those involving crosslinking agents, in view of the present application. For example, immunotoxins may be constructed using a disulfide-exchange reaction or by forming a thioether bond. Examples of suitable reagents for this purpose include iminothiolate and methyl-4-mercaptobutyrimidate.

[197] ANTIBODY LABELING (ALL ABS):

- 30 [198] For diagnostic applications or otherwise as desired, and for monoclonal and other antibodies described herein, the antibodies and other binding partners typically will be labeled with a detectable moiety. The detectable moiety can be any moiety that is capable of

producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as ^3H , ^{14}C , ^{32}P , ^{35}S , or ^{125}I ; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Any method known in the art for conjugating the antibody or binding partner to the detectable moiety may be employed, including those methods described by Hunter et al., *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.*, 40:219 (1981); and Nygren, *J. Histochem. Cytochem.*, 30:407 (1982).

10

(iii) Humanized And Human Antibodies

[199] HUMANIZED AB GENERALLY:

[200] Methods for humanizing non-human antibodies are well known in the art and have been discussed in part above. Generally, a humanized antibody has one or more amino acid residues introduced into it from a source which is non-human. These non-human amino acid residues are often referred to as "import" residues, which are typically taken from an "import" variable domain. Humanization can be performed essentially following the method of Winter and co-workers, Jones et al., *Nature*, 321:522-525 (1986); Riechmann et al., *Nature*, 332:323-327 (1988); Verhoeyen et al., *Science*, 239:1534-1536 (1988), by substituting rodent CDRs or CDR sequences for the corresponding sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies, U.S. Pat. No. 4,816,567, wherein substantially less than an intact human variable domain has been substituted by the corresponding sequence from a non-human species. In practice, humanized antibodies are typically human antibodies in which some CDR residues and possibly some FR residues are substituted by residues from analogous sites in rodent antibodies.

[201] The choice of human variable domains, both light and heavy, to be used in making humanized antibodies is very important to reduce antigenicity. According to the so-called "best-fit" method, the sequence of the variable domain of a rodent antibody is screened against the entire library of known human variable-domain sequences. The human sequence that is closest to that of the rodent is then accepted as the human framework (FR) for the humanized antibody. Sims et al., *J. Immunol.*, 151:2296 (1993); Chothia and Lesk, *J. Mol. Biol.*, 196:901 (1987). Another method uses a particular framework derived from the consensus sequence of all human antibodies of a particular subgroup of light or heavy chains.

The same framework may be used for several different humanized antibodies. Carter et al., Proc. Natl. Acad. Sci. USA, 89:4285 (1992); Presta et al., J. Immunol., 151:2623 (1993).

[202] It is typically desirable that antibodies be humanized with retention of high affinity for the antigen and other favorable biological properties. To achieve this goal, according to one method, humanized antibodies are prepared by a process of analysis of the parental sequences and various conceptual humanized products using three-dimensional models of the parental and humanized sequences. Three-dimensional immunoglobulin models are commonly available and are familiar to those skilled in the art. Computer programs are available that illustrate and display probable three-dimensional conformational structures of selected candidate immunoglobulin sequences. Inspection of these displays permits analysis of the likely role of the residues in the functioning of the candidate immunoglobulin sequence, *e.g.*, the analysis of residues that influence the ability of the candidate immunoglobulin to bind antigen. In this way, FR residues can be selected and combined from the consensus and import sequences so that the desired antibody characteristic, such as increased affinity for the target antigen(s), is achieved. In general, CDR residues are directly and most substantially involved in influencing antigen binding.

[203] It is also possible to produce transgenic animals (*e.g.*, mice) that are capable, upon immunization, of producing a full repertoire of human antibodies in the absence of endogenous immunoglobulin production. For example, it has been described that the homozygous deletion of the antibody heavy-chain joining region (J_H) gene in chimeric and germ-line mutant mice results in complete inhibition of endogenous antibody production. Transfer of the human germ-line immunoglobulin gene array in such germ-line mutant mice will result in the production of human antibodies upon antigen challenge. *See, e.g.*, Jakobovits et al., Proc. Natl. Acad. Sci. USA. 90:2551-255 (1993); Jakobovits et al., Nature, 362:255-258 (1993); Bruggemann et al., Year Immuno., 7:33 (1993). Human antibodies can also be produced in phage-display libraries, Hoogenboom and Winter, J. Mol. Biol., 227:381 (1991); Marks et al., J. Mol. Biol., 222:581 (1991).

(iv) Antibody Fragments

[204] **ANTIBODY FRAGMENTS:**

[205] Various techniques have been developed for the production of antibody fragments. Such fragments can be derived via proteolytic digestion of intact antibodies, *see, e.g.*,

Morimoto et al., J. Biochem. Biophys. Meth. 24:107-117 (1992) and Brennan et al., Science, 229:81 (1985). Fragments can also be produced directly by recombinant host cells. For example, antibody fragments can be isolated from antibody phage libraries discussed above. Fab'-SH fragments can be directly recovered from *E. coli* and chemically coupled to form
5 F(ab')₂ fragments, Carter et al., Biotechnology 10:163-167 (1992). F(ab')₂ fragments can be isolated directly from recombinant host cell culture. Other techniques for the production of antibody fragments will be apparent to the skilled practitioner.

(v) Bispecific Antibodies

10 [206] **BISPECIFIC ANTIBODIES GENERALLY:**

[207] Bispecific antibodies (BsAbs) are antibodies that have binding specificities for at least two different antigens. Bispecific antibodies can be derived from full-length antibodies or from antibody fragments, e.g., F(ab')₂ bispecific antibodies.

[208] Methods for making bispecific antibodies are known in the art. Traditional
15 production of full-length bispecific antibodies is based on the coexpression of two immunoglobulin heavy chain-light chain pairs, where the two chains have different specificities, Millstein and Cuello, Nature, 305:537-539 (1983). Because of the random assortment of immunoglobulin heavy and light chains, these hybridomas (quadromas) produce a mixture of potentially 10 different antibody molecules, of which only one has the
20 correct bispecific structure. Purification of the correct molecule, which is usually accomplished by affinity chromatography steps, is rather cumbersome, and the product yields are low. Similar procedures are disclosed in WO 93/08829, and in Traunecker et al., E.M.B.O. J., 10:3655-3659 (1991).

[209] According to another approach, antibody variable domains containing the desired
25 binding specificities (antibody-antigen combining sites) are fused to immunoglobulin constant domain sequences. The fusion is preferably with an immunoglobulin heavy chain constant domain, comprising at least part of the hinge, C_H 2, and C_H 3 regions. It is preferred to have the first heavy-chain constant region (C_H 1) containing the site necessary for light chain binding, present in at least one of the fusions. DNAs encoding the immunoglobulin
30 heavy chain fusions and, if desired, the immunoglobulin light chain, are inserted into separate expression vectors, and are co-transfected into a suitable host organism. This provides for great flexibility in adjusting the mutual proportions of the three polypeptide fragments in

embodiments when unequal ratios of the three polypeptide chains used in the construction provide the improved yields. It is, however, possible to insert the coding sequences for two or all three polypeptide chains in one expression vector when the expression of at least two polypeptide chains in equal ratios results in high yields or when the ratios are of no particular significance.

[210] ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:

[211] In one embodiment of this approach, the bispecific antibodies are composed of a hybrid immunoglobulin heavy chain with a first binding specificity in one arm, and a hybrid immunoglobulin heavy chain-light chain pair (providing a second binding specificity) in the other arm. This asymmetric structure may facilitate the separation of the desired bispecific compound from unwanted immunoglobulin chain combinations, as the presence of an immunoglobulin light chain in only one half of the bispecific molecule provides for a facile method of separation. This approach is discussed in WO 94/04690. For further details of generating bispecific antibodies see, for example, Suresh et al., Meth. Enzymol., 121:210 (1986).

[212] ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":

[213] Bispecific antibodies include cross-linked or "heteroconjugate" antibodies. For example, one of the antibodies in the heteroconjugate can be coupled to avidin, the other to biotin. Such antibodies have, for example, been proposed to target immune system cells to unwanted cells, U.S. Pat. No. 4,676,980, and for treatment of HIV infection, WO 91/00360, WO 92/200373, and EP 03089). Heteroconjugate antibodies may be made using any convenient cross-linking methods. Suitable cross-linking agents are well known in the art, and are disclosed in U.S. Pat. No. 4,676,980, along with a number of cross-linking techniques.

[214] ANTIBODIES - DIABODIES:

[215] The "diabody" technology described by Hollinger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993) has provided an alternative mechanism for making BsAb fragments. The fragments comprise a heavy-chain variable domain (V_H) connected to a light-chain variable domain (V_L) by a linker that is too short to allow pairing between the two domains on the same chain. Accordingly, the V_H and V_L domains of one fragment are forced to pair with the complementary V_L and V_H domains of another fragment, thereby forming two antigen-binding sites.

[216] Another strategy for making BsAb fragments by the use of single-chain Fv (sFv) dimers has also been reported. See Gruber et al., J. Immunol., 152:5368 (1994). These researchers designed an antibody comprising the V_H and V_L domains of a first antibody joined by a 25-amino-acid-residue linker to the V_H and V_L domains of a second antibody.

5 The refolded molecule bound to fluorescein and the T-cell receptor and redirected the lysis of human tumor cells that had fluorescein covalently linked to their surface.

[217] **ANTIBODIES - OTHER:**

[218] Techniques for generating bispecific antibodies from antibody fragments have also been described in the literature. For example, bispecific antibodies can be prepared using chemical linkage. Brennan et al., Science, 229:81 (1985) describe a procedure wherein intact antibodies are proteolytically cleaved to generate F(ab')₂ fragments. These fragments are reduced in the presence of the dithiol complexing agent sodium arsenite to stabilize vicinal dithiols and prevent intermolecular disulfide formation. The Fab' fragments generated are then converted to thionitrobenzoate (TNB) derivatives. One of the Fab'-TNB derivatives is then reconverted to the Fab'-thiol by reduction with mercaptoethylamine and is mixed with an equimolar amount of the other Fab'-TNB derivative to form the BsAb. The BsAbs produced can be used as agents for the selective immobilization of enzymes.

[219] Fab'-SH fragments can be directly recovered from *E. coli*, which can be chemically coupled to form bispecific antibodies. Shalaby et al., J. Exp. Med., 175:217-225 (1992) describe the production of a fully humanized BsAb F(ab')₂ molecule. Each Fab' fragment was separately secreted from *E. coli* and subjected to directed chemical coupling *in vitro* to form the BsAb. The BsAb thus formed was able to bind to cells overexpressing the HER2 receptor and normal human T cells, as well as trigger the lytic activity of human cytotoxic lymphocytes against human breast tumor targets. See also Rodriguez et al., Int. J. Cancers (Suppl.) 7:45-50 (1992).

[220] Various techniques for making and isolating BsAb fragments directly from recombinant cell culture have also been described. For example, bispecific F(ab')₂ heterodimers have been produced using leucine zippers. Kostelny et al., J. Immunol., 148(5):1547-1553 (1992). The leucine zipper peptides from the Fos and Jun proteins are linked to the Fab' portions of two different antibodies by gene fusion. The antibody homodimers are reduced at the hinge region to form monomers and then re-oxidized to form the antibody heterodimers.

b. Antibody Purification

[221] ANTIBODY PURIFICATION GENERALLY:

[222] When using recombinant techniques, the antibody can be produced intracellularly, in the periplasmic space, or directly secreted into the medium. If the antibody is produced intracellularly, as a first step, the particulate debris, either host cells or lysed fragments, is removed, for example, by centrifugation or ultrafiltration. Carter et al., *Bio/Technology* 10:163-167 (1992), describe a procedure for isolating antibodies which are secreted to the periplasmic space of *E. coli*. Briefly, cell paste is thawed in the presence of sodium acetate (pH 3.5), EDTA, and phenylmethylsulfonylfluoride (PMSF) over about 30 min. Cell debris can be removed by centrifugation. Where the antibody is secreted into the medium, supernatants from such expression systems are generally first concentrated using a commercially available protein concentration filter, for example, an Amicon or Millipore Pellicon ultrafiltration unit. A protease inhibitor such as PMSF may be included in any of the foregoing steps to inhibit proteolysis and antibiotics may be included to prevent the growth of adventitious contaminants.

[223] BEFORE LPHIC:

[224] The antibody composition prepared from the cells is preferably subjected to at least one purification step prior to LPHIC. Examples of suitable purification steps include hydroxyapatite chromatography, gel electrophoresis, dialysis, and affinity chromatography. The suitability of protein A as an affinity ligand depends on the species and isotype of any immunoglobulin Fc domain that is present in the antibody. Protein A can be used to purify antibodies that are based on human $\gamma 1$, $\gamma 2$, or $\gamma 4$ heavy chains, Lindmark et al., *J. Immunol. Meth.* 62:1-13 (1983). Protein G has been recommended for mouse isotypes and for human $\gamma 3$, Guss et al., *E.M.B.O. J.*, 5:1567-1575 (1986). The matrix to which the affinity ligand is attached is often agarose, but other matrices are available. Mechanically stable matrices such as controlled pore glass or poly(styrenedivinyl)benzene allow for faster flow rates and shorter processing times than can be achieved with agarose. Where the antibody comprises a $C_H 3$ domain, the Bakerbond ABXTM resin (J. T. Baker, Phillipsburg, N.J.) is useful for purification. Other techniques for protein purification such as fractionation on an ion-exchange column, ethanol precipitation, Reverse Phase HPLC, chromatography on silica, chromatography on heparin SEPHAROSETM, chromatography on an anion or cation

exchange resin (such as a polyaspartic acid column), chromatofocusing, SDS-PAGE, and ammonium sulfate precipitation are also available depending on the antibody to be recovered.

[225] LPHIC:

[226] Following any preliminary purification step(s), the mixture comprising the antibody of interest and contaminant(s) can be subjected to LPHIC. *See* US Patent No. 6,214,984. Often, the antibody composition to be purified will be present in a buffer from the previous purification step. However, it may be necessary to add a buffer to the antibody composition prior to the LPHIC step. Many buffers are available and can be selected by routine experimentation. The pH of the mixture comprising the antibody to be purified and at least one contaminant in a loading buffer is adjusted to a pH of about 2.5-4.5 using either an acid or base, depending on the starting pH. The loading buffer can have a low salt concentration (*e.g.*, less than about 0.25 M salt).

[227] The mixture is loaded on the HIC column. HIC columns normally comprise a base matrix (*e.g.*, cross-linked agarose or synthetic copolymer material) to which hydrophobic ligands (*e.g.*, alkyl or aryl groups) are coupled. One example of an HIC column comprises an agarose resin substituted with phenyl groups (*e.g.*, a Phenyl SEPHAROSETM column). Many HIC columns are available commercially. Examples include, but are not limited to, Phenyl SEPHAROSE 6 FAST FLOWTM column with low or high substitution (Pharmacia LKB Biotechnology, AB, Sweden); Phenyl SEPHAROSETM High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); Octyl SEPHAROSETM High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); FRACTOGELTM EMD Propyl or FRACTOGELTM EMD Phenyl columns (E. Merck, Germany); MACRO-PREPTM Methyl or MACRO-PREPTM t-Butyl Supports (Bio-Rad, California); WP HI-Propyl (C₃)TM column (J. T. Baker, New Jersey); and TOYOPEARLTM ether, phenyl, or butyl columns (TosoHaas, PA).

[228] The antibody is typically eluted from the column using an elution buffer that is the same as the loading buffer. The elution buffer can be selected using routine experimentation in view of the present application. The pH of the elution buffer may be between about 2.5-4.5 and have a low salt concentration (*e.g.*, less than about 0.25 M salt). It may not be necessary to use a salt gradient to elute the antibody of interest; the desired product may be recovered in the flow-through fraction that does not bind significantly to the column.

[229] The LPHIC step provides a way to remove a correctly folded and disulfide bonded antibody from unwanted contaminants (*e.g.*, incorrectly associated light and heavy fragments). The method can provide an approach to substantially remove an impurity characterized as a correctly folded antibody fragment whose light and heavy chains fail to associate through disulfide bonding. Antibody compositions prepared using LPHIC can be up to about 95% pure or more. Purities of more than about 98% have been reported. US Patent No. 6,214,984.

[230] **POST LPHIC:**

[231] Antibody compositions prepared by LPHIC can be further purified as desired using techniques which are well known in the art. Diagnostic or therapeutic formulations of the purified protein can be made by providing the antibody composition in a physiologically acceptable carrier, examples of which are provided below. To remove contaminants (*e.g.*, unfolded antibody and incorrectly associated light and heavy fragments) from the HIC column so that it can be re-used, a composition including urea (*e.g.*, 6.0 M urea, 1% MES buffer pH 6.0, 4 mM ammonium sulfate) can be flowed through the column.

c. Some Uses For Antibodies Described Herein

(i) Generally

[232] **GENERALLY:**

[233] The present invention comprises any suitable use for the antibodies and other binding partners discussed herein. The following provides some of the desired uses, including diagnostic and therapeutic uses. Various diagnostic and therapeutic uses for antibodies have been reviewed in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.* 53:189-204 (1990); and, Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)* 50(8):901-909 (1990), for example.

[234] **ASSAYS:**

[235] The antibodies can be used in immunoassays, such as enzyme immunoassays. BsAbs can be useful for this type of assay; one arm of the BsAb can be designed to bind to a specific epitope on the enzyme so that binding does not cause enzyme inhibition, the other arm of the antibody can be designed to bind to an immobilizing matrix ensuring a high enzyme density at the desired site. Examples of such diagnostic BsAbs include those having

specificity for IgG as well as ferritin, and those having binding specificities for horseradish peroxidase (HRP) as well as a hormone, for example. Monoclonal and polyclonal antibodies are also exemplary antibodies for immunoassays.

[236] The antibodies can be designed for use in two-site immunoassays. For example, two antibodies are produced binding to two separate epitopes on the analyte protein; one antibody binds the complex to an insoluble matrix, the other binds an indicator enzyme.

[237] **DIAGNOSTIC USES:**

[238] Antibodies can also be used for immunodiagnosis, *in vitro* or *in vivo* or otherwise, of various diseases or conditions based on the presence or absence of a particular GPCR.

Such diseases and conditions include, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and

cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

- 5 [239] To facilitate this diagnostic use, an antibody that binds a particular GPCR, when such is differentially expressed in tumors or other target diseases, can be conjugated with a detectable marker (*e.g.*, a chelator that binds a radionuclide). Examples of tumor-associated antigens being used in a similar fashion include an antibody having specificity for the tumor-associated antigen CEA used for imaging colorectal and thyroid carcinomas and the anti-
10 p185^{HER2} antibody used for detecting cancers characterized by amplification of the HER2 protooncogene. Other uses for the antibodies of the present invention will be apparent to the skilled practitioner in view of the present application.

(ii) Assays

15 [240] ASSAYS:

- [241] For certain applications such as some diagnostic and other assay applications, the antibody typically can be labeled directly or indirectly with a detectable moiety. The detectable moiety can be any moiety that is capable of producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as ³H,
20 ¹⁴C, ³²P, ³⁵S, or ¹²⁵I; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or HRP.

- [242] Any method known in the art for separately conjugating the antibody to the detectable moiety may be employed, including those methods described by Hunter et al.,
25 *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.* 40:219 (1981); and, Nygren, *J. Histochem. and Cytochem.* 30:407 (1982).

- [243] The antibodies of the present invention may be employed in any desired assay method, such as competitive binding assays, direct, and indirect sandwich assays, and immunoprecipitation assays. Zola, *Monoclonal Antibodies: A Manual of Techniques*, pp.
30 147-158 (CRC Press, Inc. (1987).

[244] COMPETITIVE BINDING ASSAYS:

[245] Competitive binding assays rely on the ability of a labeled standard to compete with the test sample analyte for binding with a limited amount of antibody. The amount of analyte in the test sample is inversely proportional to the amount of standard that becomes bound to the antibody. To facilitate determining the amount of standard that becomes bound, the antibody generally is insolubilized before or after the competition, so that the standard, and analyte that are bound to the antibody may conveniently be separated from the standard, and analyte which remain unbound.

[246] BsAbs are particularly useful for sandwich assays which involve the use of two molecules, each capable of binding to a different immunogenic portion, or epitope, of the sample to be detected. In a sandwich assay, the test sample analyte is bound by a first arm of the antibody which is immobilized on a solid support, and thereafter a second arm of the antibody binds to the analyte, thus forming an insoluble three part complex. *See, e.g.*, U.S. Pat. No. 4,376,110. The second arm of the antibody may itself be labeled with a detectable moiety (direct sandwich assays) or may be measured using an anti-immunoglobulin antibody that is labeled with a detectable moiety (indirect sandwich assay). For example, one type of sandwich assay is an ELISA assay, in which case the detectable moiety is an enzyme. Assays are discussed further elsewhere herein in relation to binding partners such as antibodies, and antigenic peptides for particular GPCRs, including assays searching for or using such antigenic peptides, and would be apparent to those skilled in the art in view of the present application.

(iii) Affinity Purification

[247] AFFINITY PURIFICATION:

[248] The antibodies also are useful for the affinity purification of an antigen of interest such as a particular GPCR from sources such as recombinant cell culture or natural sources.

(iv) Therapeutics

[249] THERAPEUTIC USES:

[250] Therapeutic compositions, and uses, etc., for the antibodies described herein will now be discussed. As with other parts of this application, this section does not contain the entire discussion of therapeutic uses or compositions, etc., for antibodies; other sections discuss both antibodies, and therapeutics, and the discussion in this section applies to certain

other aspects discussed herein. Turning to antibodies and therapeutics, the antibodies can be used, for example, for redirected cytotoxicity (*e.g.*, to kill tumor cells), as a vaccine adjuvant, for delivering thrombolytic agents to clots, for delivering immunotoxins to tumor cells, for converting enzyme activated prodrugs at a target site (*e.g.*, a tumor), for treating infectious diseases or targeting immune complexes to cell surface receptors.

[251] THERAPEUTIC FORMULATIONS:

[252] Therapeutic formulations of the antibody can be prepared for storage by mixing the antibody having the desired degree of purity with optional physiologically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences, 16th edition, Osol, A., Ed. (1980), for example in the form of lyophilized cake or aqueous solutions. Acceptable carriers, excipients, or stabilizers are nontoxic to recipients at the dosages, and concentrations employed, and include buffers such as phosphate, citrate, and other organic acids; antioxidants including ascorbic acid; low molecular weight (less than about 10 residues) polypeptides; proteins, such as serum albumin, gelatin, or immunoglobulins; hydrophilic polymers such as polyvinylpyrrolidone; amino acids such as glycine, glutamine, asparagine, arginine, or lysine; monosaccharides, disaccharides, and other carbohydrates including glucose, mannose, or dextrans; chelating agents such as EDTA; sugar alcohols such as mannitol or sorbitol; salt-forming counterions such as sodium; or nonionic surfactants such as Tween, Pluronic, or polyethylene glycol (PEG).

[253] The antibodies also may be entrapped in microcapsules prepared, for example, by coacervation techniques or by interfacial polymerization (for example, hydroxymethylcellulose or gelatin-microcapsules, and poly-[methylmethacrylate] microcapsules, respectively), in colloidal drug delivery systems (for example, liposomes, albumin microspheres, microemulsions, nano-particles, and nanocapsules), or in macroemulsions. Such techniques are disclosed in Remington's Pharmaceutical Sciences, *supra*.

[254] THERAPEUTIC FORMULATIONS -STERILE:

[255] An antibody to be used for *in vivo* human administration should be sterile. This can be accomplished by filtration through sterile filtration membranes, for example prior to or following lyophilization and reconstitution. The antibody ordinarily will be stored in lyophilized form or in solution. Therapeutic antibody compositions generally are placed into

a container having a sterile access port, for example, an intravenous solution bag or vial having a stopper pierceable by a hypodermic injection needle.

[256] THERAPEUTIC ADMINISTRATIONS:

[257] The route of antibody administration is in accord with known methods, *e.g.*,
5 injection or infusion by intravenous, intraperitoneal, intracerebral, intramuscular, intraocular, intraarterial, or intralesional routes, or by sustained release systems as noted below.

[258] The antibody can be administered, for example, continuously by infusion or by bolus injection. Suitable examples of sustained-release preparations include semipermeable matrices of solid hydrophobic polymers containing the protein, which matrices are in the
10 form of shaped articles, *e.g.*, films, or microcapsules. Examples of sustained-release matrices include polyesters, hydrogels (*e.g.*, poly(2-hydroxyethyl-methacrylate) as described by Langer et al., J. Biomed. Mater. Res., 15:167-277 (1981), and Langer, Chem. Tech., 12:98-105 (1982), or poly(vinylalcohol)), polylactides, U.S. Pat. No. 3,773,919; EP 58,481, copolymers of L-glutamic acid and gamma ethyl-L-glutamate, Sidman et al., Biopolymers,
15 22:547-556 (1983), non-degradable ethylene-vinyl acetate, Langer et al., *supra*, degradable lactic acid-glycolic acid copolymers such as the LUPRON DEPOTTM (injectable microspheres composed of lactic acid-glycolic acid copolymer and leuprolide acetate), and poly-D-(-)-3-hydroxybutyric acid, EP 133,988.

[259] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-POLYMERS:
20

[260] While polymers such as ethylene-vinyl acetate and lactic acid-glycolic acid sustain release of molecules for over 100 days, certain hydrogels release proteins for shorter time periods. When encapsulated antibodies remain in the body for a long time, they may denature or aggregate as a result of exposure to moisture at 37°C, resulting in a loss of
25 biological activity and possible changes in immunogenicity. Rational strategies can be devised for antibody stabilization depending on the mechanism involved. For example, if the aggregation mechanism is discovered to be intermolecular S--S bond formation through thio-disulfide interchange, stabilization may be achieved by modifying sulfhydryl residues, lyophilizing from acidic solutions, controlling moisture content, using appropriate additives,
30 and developing specific polymer matrix compositions.

[261] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-LIPOSOMES:

[262] Sustained-release antibody compositions also include liposomally entrapped antibody. Liposomes containing the antibody can be prepared by methods such as those in DE 3,218,121; Epstein et al., Proc. Natl. Acad. Sci. USA, 82:3688-3692 (1985); Hwang et al., Proc. Natl. Acad. Sci. USA, 77:4030-4034 (1980); EP 52,322; EP 36,676; EP 88,046; EP 5 143,949; EP 142,641; Japanese patent application 83-118008; U.S. Pat. Nos. 4,485,045 and 4,544,545; and EP 102,324. Ordinarily the liposomes are of the small (about 200-800 Angstroms) unilamellar type in which the lipid content is greater than about 30 mol. % cholesterol, the selected proportion being adjusted for the optimal antibody therapy.

[263] **THERAPEUTICALLY EFFECTIVE AMOUNT:**

10 [264] An effective amount of antibody to be employed therapeutically will depend, for example, upon the therapeutic objectives, the route of administration, and the condition of the patient. Accordingly, it will be necessary for the therapist to titer the dosage and modify the route of administration as required to obtain the optimal therapeutic effect. A typical daily dosage might range from about 1 µg/kg to up to 10 mg/kg or more, depending on the factors
15 mentioned above. Typically, the clinician will administer antibody until a dosage is reached that achieves the desired effect. The progress of this therapy is easily monitored by conventional assays.

20 5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR ANTIBODIES THERETO

[265] **DISEASE/CONDITIONS LIST:**

[266] The peptides and antibodies of the present invention can serve as valuable tools for designing drugs for treating various pathophysiological conditions such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-
25 related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (e.g., osteoarthritis, osteoporosis), carcinoma (e.g., basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung
30 small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne

muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved or that would be readily apparent to those skilled in the art in view of the present application.

EXAMPLES

[267] The Examples below provide information as follows: Example 1 relates to the identification and selection of the antigens set forth in Figure 2. Examples 2 to 4 relate to antibody production and purification based on such antigens. Examples 5 to 10 relate to H&E staining. And, Example 11 relates to Western blot analyses.

EXAMPLE 1: SELECTION OF ANTIGENS

[268] Antigenic peptides were derived from the amino acid sequence of a particular GPCR based on analyses of likely antigen-containing regions and specificity of those regions for the protein/gene of interest. The specificity of the antigen peptides (approximately 20 amino acids in length) for antibody generation was determined using the outlined techniques, including BLAST of several public databases. These public databases included but were not limited to GenBank, Swiss Prot Human, Swiss Prot NonHuman, GenPeptH, GenPept M, and

LifeSpan's proprietary databases. With respect to specificity, parameters that precluded the use of a particular peptide included the presence of 6 or more contiguous amino acids with sequence identity to protein(s) other than the protein of interest, the presence of sites of posttranslational modification, including phosphorylation and glycosylation, and highly hydrophobic sequences, which could indicate potential *in situ* localization within the plasma membrane. The peptides were analyzed for antigenicity using the published algorithm of Hopp, T. P., and Woods, K. R, Proc. Natl. Acad. Sci. U.S.A. 78, 3824-3828, (1981). Additional considerations in antigenic peptide design included 1) selection against sequences with multiple prolines in a row, 2) selection against sequences with multiple serines in a row, 3) selection against sequences with multiple lysines in a row, 4) selection against sequences with multiple arginines in a row 5) selection against sequences with multiple aspartic acids in a row, 6) selection against sequences with multiple glutamic acids in a row, 7) selection against peptides containing methionine or tryptophan, which can become oxidized as a result of the cyclization reaction, and 8) avoidance of stretches of 5 or more amino acids having no uncharged amino acids (which also resulted in a desirable charge to peptide length ratio of at least 1 charge:5 residues). The selected antigenic peptides are set forth in the Sequence Listing and in Figure 2.

EXAMPLE 2: ANTIBODY PRODUCTION SCHEDULE

- [269] Day 0 - Pre-immune serum collection (approximately 5.0 ml). Immunize using 200 µg antigen peptide per rabbit in Complete Freund's Adjuvant.
- [270] Day 14 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [271] Day 28 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [272] Day 42 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [273] Day 49 - First production bleed; obtain 24.0 - 26.0 ml.
- [274] Day 56 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [275] Day 63 - Second production bleed and ELISA analysis.

[276] Day 70 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.

[277] Day 77 - Third production bleed and affinity purification.

5 **EXAMPLE 3: IMMUNOSORBENT PURIFICATION OF ANTISERUM:
 COUPLING OF PEPTIDE TO CNBR-ACTIVATED SEPHAROSE 4B**

[278] Weigh out 0.8 g of CNBr-activated Sepharose 4B (2.5 ml of final gel volume). Wash and re-swell on sintered glass filter with 1 mM HCl, followed by coupling buffer (0.1 M NaHCO₃, 0.25 M NaCl, pH 8.5). Dissolve 10 mg of protein or peptide in coupling buffer.
10 Mix protein solution with gel suspension and incubate 2 hours at room temperature or overnight at 4°C. Block remaining active groups with 0.2 M glycine buffer, pH 8.1. Wash away excess adsorbed protein with coupling buffer, followed by 0.1 M acetate buffer containing 0.5 M NaCl, pH 4.3. Equilibrate the column with phosphate-buffered saline (PBS), pH 7.7.

15 **EXAMPLE 4: IMMUNOSORBENT PURIFICATION OF ANTISERUM:
 AFFINITY PURIFICATION OF ANTISERUM**

[279] Dilute 10 ml of clear antiserum 1:1 with PBS, pH 7.7, apply to affinity column at a flow rate of 0.3 ml/minute, and monitor absorbance of eluate at 280 nm. Collect fractions of
20 unbound material and rinse column with PBS, pH 7.7. Elute bound antibody with 0.2 M glycine, pH 1.85, and collect eluate until absorbance at 280 nm returns to baseline. Neutralize all collected fractions with 1 M Tris-HCl, pH 8.5 immediately after collection. Determine OD at 280 nm, and determine the total OD recovered. Conduct ELISA analysis with the corresponding antigen to confirm the presence and identity of recovered antibody
25 and the removal of all antibody from the original serum. Concentrate antibody to approximately 2.0 mg/ml and dialyze against PBS with 0.01% NaN₃.

EXAMPLE 5: PREPARATION OF ANTIBODY DILUTIONS

[280] The purpose of this protocol is to dilute antibodies in solution. Materials include
30 Tris-HCL Buffer with carrier protein and 0.015 M NaN₃ (Dako Antibody Diluent #S0809 (DAKO, Carpinteria, CA); vials containing the antibodies described above or commercial antibodies against the particular GPCR; pipetmen and disposable tips; container of chopped ice; 12 ml Dako reagent tubes; and, reagent tube rack.

- [281] The procedure is a) calculate proportions of antibody and diluent according to desired concentrations and volume requirements; b) label reagent tubes and place in rack; c) pipette needed volume of diluent into tube(s); d) place vials of antibodies into ice; e) invert and/or flick antibody vial(s) 3 or 4 times to insure suspension; f) pipette required volume of antibody(s) into corresponding diluent volumes; and, g) mix gently.

EXAMPLE 6: PREPARATION OF AUTOSTAINER SOLUTIONS

- [282] The purpose of this protocol is the preparation of concentrated solutions for use in a DAKO autostainer. Materials include DAKO[®] TBST (Tris Buffered Saline Containing Tween-S3306), 10X Concentrate, DAKO[®] Target Retrieval Solution, 10x Concentrate (S1699), deionized H₂O, 20L container, with lid, marked at the 10L level, DAKO[®] TBS (Tris Buffered Saline-S1968), and DAKO Tween[®] (S1966).

- [283] The procedure to make TBST 10x Concentrate is a) pour 2 500 ml bottles DAKO[®] TBST into a 20 L container, b) add deionized H₂O until solution level is at 10 L mark, c) replace lid and shake 10 to 20 times, d) pour diluted DAKO[®] TBST into autostainer carboy(s) as designated. The procedure to make Target Retrieval Solution is a) measure 135 ml of deionized H₂O and pour into slide bath, b) measure 15 ml of DAKO[®] Target Retrieval solution, c) add to H₂O, and d) agitate. This solution is then used in the steam method of target retrieval, Example 9, below. The procedure to make TBS is a) fill 20L container to 10L mark with deionized H₂O, b) add 2 envelopes of DAKO[®] TBS, c) add 5 ml of DAKO TWEEN[®], and d) replace lid and agitate 10 to 20 times.

EXAMPLE 7: PREPARATION OF SOLUTIONS FOR ANTIBODY DETECTION

- [284] Solutions for antibody detection are prepared using Vector[®] Biotinylated antibody (BA series), Vectastain[®] ABC-AP Kit (AK-5000), 10 mM sodium phosphate, pH 7.5, 0.9% saline (PBS), Vector[®] Red Alkaline Phosphatase Substrate Kit I (SK-5100), and 100 mM Tris-HCl, pH 8.2 Buffer. To prepare biotinylated antibody, add 10 ml of PBS to reagent tube, add 1 drop biotinylated antibody to the PBS, then mix gently. To prepare ABC, to 10 ml of PBS, add 2 drops each of Reagent A and Reagent B, mix immediately, then allow to stand 30 minutes before use. To prepare AP Red, which should be prepared immediately

before use, to 5 ml of Tris-HCl buffer, add 2 drops of Reagent 1 and mix well, add 2 drops of Reagent 2 and mix well, then add 2 drops of Reagent 3 and mix well.

EXAMPLE 8: DEPARAFFINIZATION AND REHYDRATION OF SAMPLES

[285] The purpose of this protocol is to remove paraffin from and rehydrate preserved tissues in preparation for IHC procedures. Materials and equipment include fume hood, vertical slide rack(s), three xylene (VWR #72060-088) baths, three 100% alcohol blend (VWR #72060-050) baths, two 95% alcohol blend (VWR #72060-052) baths, one 70% alcohol blend (VWR #72060-056) bath, and Tris-Buffered Saline (DAKO® S1968) + Tween® (DAKO S1966).

[286] Insert the slides into the vertical rack(s). Move slides through baths inside fume hood as follows:

Xylene 5 Minutes
Xylene 5 Minutes
Xylene 5 Minutes
100% Alcohol 2 Minutes
100% Alcohol 2 Minutes
100% Alcohol 1 Minute
95% Alcohol 2 Minutes
95% Alcohol 2 Minutes
70% Alcohol 1 Minute

[287] Finally, place slides into a container with TBST.

EXAMPLE 9: STEAM METHOD OF TARGET RETRIEVAL

[288] The purpose of this protocol is to optimize antibody binding within paraffin embedded tissues. Materials and equipment included a steamer, deionized H₂O, target retrieval solution, 10X concentrate (DAKO #S1699), 250 ml graduated cylinder, 15 ml graduated cylinder, staining dish(es), and deparaffinized and rehydrated tissue on microscope slides in immersed TBST. The procedure is to a) fill the steamer with deionized H₂O to appropriate depth as indicated, b) turn the steamer on, c) in a graduated cylinder, measure 135ml of deionized H₂O and pour into staining dish(es), d) pipette 15ml of target retrieval solution and release into deionized H₂O, e) place the staining dish(es) into the basket of the steamer and heat for at least 10 minutes to preheat, f) add rack(s) containing tissue slides to heated target retrieval solution, g) cover and steam for 20 minutes, h) remove container from

steamer and let stand at room temperature for 20 minutes, i) transfer rack(s) with slides to container(s) of TBST, and j) slides are now ready for staining procedures.

EXAMPLE 10: ANTIBODY DETECTION

- 5 [289] The deparaffinized, rehydrated, and steamed (if needed) slides are loaded onto racks within a DAKO autostainer and then the autostainer is run according to the manufacturer's instructions. The slides are removed and the autostainer is turned off.

EXAMPLE 11: WESTERN BLOTTING

- 10 [290] The purpose of this protocol is to visualize the immunoreactivity of the antibodies described above against the particular GPCR on a western blot. Materials and equipment included western blot membrane, TBS Tween (TBST: 100 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.1% TweenTM 20), 5% non-fat dried milk in TBST (blotto), antibody of interest (primary), peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) (secondary) –
15 Jackson ImmunoResearch, ECL solution (Amersham Biosciences, Uppsala Sweden), film, developer D-19, fixer, rocking platform.

- [291] During the blotting procedure, the blot is kept wet at all times and on a substantially level surface. The Western blot is placed right-side up in 10 ml of blotto. The membrane is flipped over and the dish rocked so that the solution covered it. The membrane is then
20 flipped back to the right side and solution is again rocked over it. The blot is then placed on a shaker for at least 1 hour. Ten ml of primary antibody are prepared by diluting 1:500 in blotto.

- [292] The blotto is removed from the Western blot and replaced with the primary antibody. The blot is flipped again and placed on the shaker for 1 hour. Secondary antibody
25 and peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) are prepared 1:20,000 in 10 ml of blotto. The primary antibody is removed and the Western blot is washed 3 times with 10 ml of blotto. The blotto is removed and replaced with the secondary antibody solution. The blot is flipped and placed on the shaker for 1 hour. The secondary antibody is removed and the blot washed 2 times with 10 ml of blotto. The blotto is removed and the blot is
30 washed 2 times with 10 ml TBST. ECL is prepared by combining equal amounts of Solution 1 and 2.

[293] The blotto is removed and 1 ml of ECL is placed on the blot. The blot is flipped and let sit for 1 minute. The blot is placed on plastic wrap and immediately covered with plastic wrap. The ECL is pressed out. The blot is placed on the film, then the film is developed.

5

[294] From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention includes all permutations and combinations of the subject matter set forth herein

10 and is not limited except as by the appended claims.

WHAT IS CLAIMED IS:

1. An isolated antigenic peptide according to any one of SEQ ID NOS. 692-2292.
- 5 2. An isolated antigenic peptide comprising an amino acid sequence that is at least about 90% identical to a sequence set forth in any one of SEQ ID NOS. 692-2292.
3. An isolated antigenic peptide that is an analog of an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
4. An isolated antigenic peptide comprising a short antigenic amino acid
10 sequence that is identical to at least 5 consecutive amino acids set forth in any one of SEQ ID NOS. 692-2292.
5. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any one of SEQ ID NOS. 692-
15 2292.
6. A kit for the detection of antibodies against a particular GPCR in a sample comprising:
 - a) an isolated antigenic peptide according to any one of claims 1-5 and derived from the particular GPCR, and
 - 20 b) at least one of a reagent or a device for detecting the antibodies.
7. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151,
25 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187,
30 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.
8. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is at least about 90% identical to any

one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using the peptide sequence that is
5 at least about 90% identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

9. An isolated antibody having high specificity and high affinity or avidity for a
10 particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the
15 peptide sequence that is the analog to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

10. An isolated antibody having high specificity and high affinity or avidity for a
20 particular GPCR comprising a peptide sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced
25 using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

30 11. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955,
5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270,
10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

12. An isolated antibody specific for a particular GPCR comprising a peptide
15 sequence that is at least about 90% identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679,
20 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using the peptide sequence that is at least about 90% identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086,
25 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 13. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is the analog to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

14. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 20 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 25 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 15. A kit for the detection of antibodies against the particular GPCR of claim 5 comprising:

- a) an isolated antibody according to any one of claims 7-14, and

- b) at least one of a reagent or a device for detecting the antibody.
16. An assay for the detection of a particular GPCR in a sample, comprising:
- a) providing an isolated antigenic peptide according to any one of claims 1-5,
- b) contacting the isolated antigenic peptide with the sample under conditions suitable
- 5 and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the particular GPCR present in the sample, to provide an antibody-bound antigenic peptide, and
- c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the particular GPCR.
- 10 17. The assay of claim 16 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.
18. The assay of claim 16 or 17 wherein the sample is an unpurified sample.
19. The assay of any one of claims 15-18 further comprising, prior to the contacting, obtaining the sample from a human being.
- 15 20. The assay of any one of claims 15-19 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an
- 20 immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.
21. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
22. The isolated nucleic acid molecule according to claim 21 wherein the
- 25 molecule encodes a naturally occurring human antigenic peptide.
23. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in SEQ ID NOS. 692-2292.
24. The isolated nucleic acid molecule according to claim 23 wherein the antigenic peptide is at least about 95% identical to the antigenic peptide.
- 30 25. The isolated nucleic acid molecule according to claim 23 or 24 wherein the molecule encodes a naturally occurring human antigenic peptide.

26. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292 to genomic DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.
- 5 27. A method of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence wherein the antigenic peptide has a length of about 5 to about 100 amino acids, the method comprising:
- a) searching the candidate polypeptide sequence using a comparison window of the length, and
 - 10 b) selecting against amino acid sequences of the length and having at least 3 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising
 - 15 no charged amino acids.
28. The method of claim 27 wherein the method further comprises selecting against at least 5 of the characteristics.
29. The method of claim 27 wherein the method further comprises selecting against at least 7 of the characteristics.
- 20 30. The method of claim 27 wherein the method further comprises selecting against the 9 characteristics.
31. The method of any one of claims 27-30 wherein the method further comprises:
- c) selecting against amino acid sequences of the length and having at least one of the following additional characteristics 1) sequences having at least 5 consecutive amino
 - 25 acids that are identical to an alternative amino acid sequence from an alternative polypeptide that is different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences.
32. The method of claim 31 wherein the posttranslational modification sites are phosphorylation or glycosylation sites.
- 30 33. The method of claim 31 or 32 wherein the method further comprises selecting against at least 2 of the additional characteristics.

34. The method of claim 31 or 32 wherein the method further comprises selecting against the 3 additional characteristics.
35. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.
- 5 36. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST analysis for the candidate polypeptide sequence.
37. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 50 amino acids.
38. The method of any one of claims 27-36 wherein the antigenic peptide has a
10 length from 6 amino acids to about 20 amino acids.
39. The method of any one of claims 27-36 wherein the antigenic peptide has a length of about 20 amino acids.
40. The method of any one of claims 27-39 wherein the polypeptide is a protein.
41. The method of any one of claims 27-40 wherein the polypeptide is a human
15 protein.
42. The method of any one of claims 27-41 wherein the polypeptide is a naturally occurring protein.
43. An isolated antigenic peptide that is specific for the candidate polypeptide of any one of claims 27-42 that is produced according to the method of any one of claims 27-42.
- 20 44. An antigenic peptide that is at least about 90% identical to the isolated antigenic peptide of claim 43.
45. An isolated antigenic peptide that is an analog of the isolated antigenic peptide of claim 43.
46. An isolated antigenic peptide comprising a short antigenic amino acid
25 sequence that is identical to at least 5 consecutive amino acids of the isolated antigenic peptide of claim 43.
47. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids of the isolated antigenic peptide of claim
30 43.
48. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 in a sample comprising:

- a) an isolated antigenic peptide according to any one of claims 43-47 and derived from the candidate polypeptide, and
 - b) at least one of a reagent or a device for detecting the antibodies.
49. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 43, wherein the antibody was produced using the isolated antigenic peptide of claim 43.
50. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 44, wherein the antibody was produced using the isolated antigenic peptide of claim 44.
51. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 45, wherein the antibody was produced using the isolated antigenic peptide of claim 45.
52. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 46, wherein the antibody was produced using the isolated antigenic peptide of claim 46.
53. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 47, wherein the antibody was produced using the isolated antigenic peptide of claim 47.
54. The isolated antibody of any one of claims 49-53 wherein the antibody has high specificity and high affinity for the candidate polypeptide.
55. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 comprising:
- a) an isolated antibody according to any one of claims 49-53, and
 - b) at least one of a reagent or a device for detecting the antibody.
56. An assay for the detection of a candidate polypeptide in a sample, comprising:
- a) providing an isolated antigenic peptide according to any one of claims 43-47,
 - b) contacting the isolated antigenic peptide with the sample under conditions suitable and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the candidate polypeptide present in the sample, to provide an antibody-bound antigenic peptide, and
 - c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the candidate polypeptide.

57. The assay of claim 56 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.

58. The assay of claim 56 or 57 wherein the sample is an unpurified sample.

59. The assay of any one of claims 56-58 further comprising, prior to the
5 contacting, obtaining the sample from a human being.

60. The assay of any one of claims 56-59 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an
10 immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

61. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of claims 43-47.

15 62. The isolated nucleic acid molecule according to claim 61 wherein the molecule encodes a naturally occurring human antigenic peptide.

63. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in claims 43-47.

64. The isolated nucleic acid molecule according to claim 63 wherein the
20 antigenic peptide is at least about 95% identical to the antigenic peptide.

65. The isolated nucleic acid molecule according to claim 63 or 64 wherein the molecule encodes a naturally occurring human antigenic peptide.

66. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of claims 43-47 to genomic
25 DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	SpeciesName
526	160397	Latrophilin-2	NP_036434.1	<p>MVSSGCRMRS LWFILVIFSL PNTEGFSRAA LPFGLVRREL SCEGYSIDLR CPGSDVIMIE SANYGRTDDK ICDADPFQME NTDCYLPDAF KIMTQRNNR TQCIVVTGSD VFDPDPCGTY KYLEVQYECV PYFVCPGTL KAIVDSPCIY EAEQKAGAWC KDPLQAADKI YFMPWTPYRT DTLIEYASLE DFQNSRQITTT YKLPNRVDGT GFVYDGAUF FNKERTRNIV KFDLRTRKS GEAINYANY HDTSPYRWGG KTDIDLA VDE NGLWVIYATE QNNGMIVISQ LNPYTLRFEA TWETVYDKRA ASNAFMICGV LYVVRSVYQD NESETGKNSI DYIYNTRLNR GEYVDVPPFN QYQYIAADV NPRDNQLYVW NNNFILRYSL EFGPPDPAQV PTTAVTITSS AELFKTIIST TSTTSQKGP STTVAGSQEG SKGTKPPAV STTKIPITN IFPLPERFCE ALDSKGIKWP QTQRGMMAVER PCPKGTRGTA SYLCMISTGT WNPKGPDLSN CTSHWVNQLA QKIRSGENAA SLANELAKHT KGPVFA GDVS SSVRLMEQLV DILDAQLQEL KPSEKDSAGR SYNKAIVDTV DNLLRPEALE SWKHMNSSEQ AHTATMLLDT LEEGAFVLAD NLEPTRVSMPTENIVLEVA VLTSEGQIQD FKFPLGIKGA GSSIQLSANT VKQNSRNLGA KL VFIYRSL GQFLSTENAT IKLGADFIGR NSTIA VNSHV ISVSINKESS RYLTDPVLF TLPHIDPDNY FNANCSFWNY SERTMMGYWS TQCKLVDN KTRITCACSH LTNFMAILMAH REIAYKDGVBH EILLTVITWV GIVISLVCLA ICITFCFFR GLQSDRNTH KNLCINLFIA EFIFLIGIDK TKYAIACPIF AGLLHFFFLA AFAWMCLEGV QLYLMLVEVF ESEYSRKKYY YVAGYLPAT VVGVSAAIDY KSYGTEKACW LHVDNYFIWS FIGPVTIFIL LNIIFLVITL CKMVKHSNTL KPDSSRLNI KSWVLGAFAL LCLLGLTWSF GLLFINEETI VMAYLFTFN AFQGVFIIF HCALQKKVRK EYKQCFRHSY CCGGLPTESP HSSVKASTTR TSARYSSGTQ SRIRRMWNTD VRKQSESSFI SGDINSTSL NOGHSNNAR DTSAMDITPL NGNFNNSYSL HKGDYNDVSQ VVDCGLSLND TAFEKMISE LVHNNLRGSS KTHNLELTL VPVIGGSSS EDDAIVADAS SLMHSNDNPL ELHHKELEAP LIPQRTHSL YQPQKKVKSE GTDSYVSQLT AEAEDHLQSP NRDSLYTSMPL NRDSYPYSP SPDMEEIDLSP SRRSENEIDIY YKSNPNLGAG HQLQMCYQIS RGNSDGYIIP INKEGCIPEG DVREGQMQL V TSL ccgcggctagg gagacagcga gccagagctt ggggtttgt gcgagagcca cggcgggggc tggggcgagt gggcggcag gctgaaaggct gcgctctgca acctgagga gccgctgcat tgaagaggca gggacagggga gaccggggcg atggcagagc gcggcccccgc cgcctgcgcc gggccggccc ggcctggcctg agccgccgga ggaagcgggc tgcctctgcg cgtccatgga gcagcgggaa gggcgaact ccggagcgcc gctgcccgcc gcgcctggc ggcctggcgg acatcgaggg gccgcgggg accgcgagg aagaagcccc cgtccagccc cgcagggccc cggccgggg gcggcgggg acatcgaggg gccgcggagc gagcagccc gcgggagagg ccggcgagg aggcggccgc agcaatgcc gggccgggg ggcctctgct ctctcggc ctggggcgc tggcctggc cggggccagc ggcgcgggc cggctctcgc cggcgccgc tgcagctggc accgggaccc tcgggtggac tgcctcggga aggggctgac gggcgctccc gaggggctca gcgcctcac ccagagcctg galatcagta tgaacaacat tactcagtg ccagaagat catttaaga ctctcttt ctagaagagc tacaatggc gggcaacgac ctctctta tccaccaaa ggccttgctt ggggtgaag aactcaaat tcaacgctc cagaataac agtgaaaac agtacccagt gaagccattc gagggctgag tgccttgca gctttgctg tagatgcaa ccaattacc taagtcccg aggacagttt tgaaggact</p>	P	Homo sapiens
527	160411	G Protein-Coupled Receptor GPR48	NM_018490	<p>ccgcggctagg gagacagcga gccagagctt ggggtttgt gcgagagcca cggcgggggc tggggcgagt gggcggcag gctgaaaggct gcgctctgca acctgagga gccgctgcat tgaagaggca gggacagggga gaccggggcg atggcagagc gcggcccccgc cgcctgcgcc gggccggccc ggcctggcctg agccgccgga ggaagcgggc tgcctctgcg cgtccatgga gcagcgggaa gggcgaact ccggagcgcc gctgcccgcc gcgcctggc ggcctggcgg acatcgaggg gccgcgggg accgcgagg aagaagcccc cgtccagccc cgcagggccc cggccgggg gcggcgggg acatcgaggg gccgcggagc gagcagccc gcgggagagg ccggcgagg aggcggccgc agcaatgcc gggccgggg ggcctctgct ctctcggc ctggggcgc tggcctggc cggggccagc ggcgcgggc cggctctcgc cggcgccgc tgcagctggc accgggaccc tcgggtggac tgcctcggga aggggctgac gggcgctccc gaggggctca gcgcctcac ccagagcctg galatcagta tgaacaacat tactcagtg ccagaagat catttaaga ctctcttt ctagaagagc tacaatggc gggcaacgac ctctctta tccaccaaa ggccttgctt ggggtgaag aactcaaat tcaacgctc cagaataac agtgaaaac agtacccagt gaagccattc gagggctgag tgccttgca gctttgctg tagatgcaa ccaattacc taagtcccg aggacagttt tgaaggact</p>	A	Homo sapiens

[illegible]

528	160411	G Protein- Coupled Receptor GPR48	NP_060960.1	<p> algtatttaa taataaataa agaaagaaaga ataaagactta gtccctgtgtc ttaaaatit aaaaattitia ctgatitcc aictatgggc tttagacctta ttactgggttg gtagcttaaa gtataatig ttcaatag ttittigaaca gtagcttaaa tcaatagcaa acccactggc atattagtta ttctgaatat actataaaaa tccagctaga ttgtagttta atataaac tgcatalact tgcatalataa tgaattittia tcttagttaa atattttta gaacacaagt tgggaaatgt ggcctctgtt catitgttt aataaagct accctctaaa ctatagtggc tgcagtagc agactgttaa atgtgtgtt atatacttt tgcattgtaa atagictgtg ttgacattg tcaagtglaa aaaaacagaa tctttgtata tcaaatcat gtatgttga taagaatgg gaagagttaa ttacagagt gtgtaatit tgaaggcca actatttaca agttttaaaa attgctatca tglataitia cacatcgtat aaataitaaa tcaataactg gaaagaact cctaaitaaa aggtttttc caaaattcag gtatgtgaa atttttcatt ttattcatt aaaaactaga ataacagala taataaagtg ttaactttg tgcataagg taagaatac aaatagtac tcaagtgtt gaattattaa agttttcaga aagcaaaaaa a MPGLGLLCF LALGLGSAG PSGAAPPLCA APCSDGDRR VDCSGKGLTA VPEGLSAFTQ ALDISMNNIT QLPEDAFKNF PFLEELQLAG NDLSFIHPKA LSGLKELKVL TLQNNQLKTV PSEAIRGLSA LQSLRLDANH ITSVPDSFE GLVQLRHLWL DDNSLTEVPV HPLSNLPTLQ ALTLANKIS SIPDAFTNL SSLVVLHLHN NKIRGLSQHC FDGLDNLLET DLSYNNLGEF PQAUKARPSL KELGFHSNSI SVIPDGAFDG NPLLRTHLY DNPLSFVGN ASHNLSDLHS LVIRGASMVQ QFPNLTGTVH LESLTLTGK ISSIPNNLCQ EQKMLRTLDL SYNNRDLPS FNGCHALEEI SLQRNIYQI KEGTFQGLS LRLLDLRNL HEIHSRAFA TLGPITNLDV SFNELTSFT EGPNGLNQLK LVGNFKLKEA LAAKDFVNL SLSVPYAYQC CAFWGCDYA NLNTEDNSLQ DHSVAQEKGT ADAANVTSTL ENEEHSQIII HCTPSTGAFK PCEYLLGSWM IRLTVWFEL VALFFNLLVLTTFASCTSL PSSKLFGLI SVSNLFMGIY TGILTFLDV SWGRFAEFI WWETGSGCKV AGFLAVFSE SAJFLMLAT VERSLSAKDIMKNGKSNHLK QFRVAALSFA LGATVAGCFP LFRGEYSAS PLCLPFTTGE TPSLGTFTVL VLLNSLAFL MAVYTKLYC NLEKEDLSEN SQSSMIKHVA WLIFTNCTFF CPVAFTSFAP LITAISPE IMKSVTLIFF PLPACLNPLV YVFNPKFKE DWKLLKRRVT KKSQSVSVSI SSQGGCLEQD FYYDCGMYSH LQGNLTVDCD CESFLLTKPV SKHLIKSHS CPALAVASQ RPEGYWSDCG TQSAHSDYAD EEDSFVSDSS DQVQACGRAC FYQSRGFPLV RYAYNLPRVK D </p>	P	Homo sapiens
529	160435	LS160435 Receptor	AX147830	<p> aacttgaagg gtagcgtct ggcgcacag aacacttct caagcactti gtagtgaacc ggtcttgaag ctggtagctg gcccccgag tcccgggtc tgaaggacagg ccgtcgaact aaggttga tctgttacc tggagacct ctgagctc acctgtact tctccgtc ctctgtaca gagccgggc gagggaacct ccaggtagtga ggtccggac agcacgggc cggacaacgc gacgtgtcag atgtgtcggga accggcgat cgggtgtgct cgtccgttgg tgtactgtt ggtgtgggc gtacatcc cgggcaacct ctctctgt tgggtgtgt ggcggcgat gggggccaga tcccggtgg tcatctcat gatcaacctg aggtcacagg acctgtgt ggcacggcgt tgccttcc aaacttacta ccatgtcaac cgtccacct gggtaattgg ggtgtgtgt tgcacgttgg tgcacgttgg cgtgtgtgt cgtgtgtgt agcgtgtgt agcgtgtgt tgtatcagcg tgaagcgtt cctgggggtc ctgtacccgc tgaacccgtg tcccgctgg cggcgaccga tctaacctac ccgtgtcag cgtgtgtga ggggacctgg tgcgtgtgt gacagccctg tcccgctgg cgtgtgtgt tctaacctac ccgtgtcag ccttgggtcat catcaacctg ttcagctgt tcaagtggtac gtagtctccc agcgtgtgt tcttcttc accatctca tctgtgtt cctcatccg ttctgtgatca cgtgtgtgt ttaacaggcc accatctca agcgtgtgt cagggagag ggcacaggcc gggagcagcg gtagcggcgt cgggtgtgt cttgtgtgt tttgtacct </p>	A	Homo sapiens

530	160435	LS160435 Receptor	LR80		<p>gcttcggccc caacaacttc gttgtctctgg cggcaccatcgt gtagccggcgg ttctacgggca agagctactia ccacggigtac aagctcacggc ttgtgtctcag ctggctctaac aactgtttgt tttattctt gctgtccgggg aattccagct ggcgcgtggg ggaatttggc gctgtccggc ggttgcocaga gatacccttgg acacggggcc gtaggggttc ttctccggcca gtagccacggc ctgtgttggc gtagccggcggc cggcacccttga aggggttggtag gtagggccacca ggtccggggcc ctaggggttgg tcttgggtccc gggggcggcggc cttggggggc gcttgggggca tccagggggc ctaggggggg ccacgggtggcc agaggtttcag gtaggacagc tgcgttggct ccaggccctg caggggccgg gtaggggggg gctccaggc ttattctc ccaggccctg caggccggcc ggttggggtag gttgttcagg cttccatcag gtaggggga caggcagaagc ccaggcggc acagggggtt tttttatctt caggggggc cttctctct cttgtgtcagg gtagcagcttg tttaccacgg ccggggcatt tttgtatt ttttttag agctggggc tcccccga gctctttaga cactctcac accgttcat accgggggtag gtagattcaa ccaggccccc accctaccg actcgggtt ttgtattct cttgtggcga actgggggg accgttccc cttctccc tctgtttatc cttgttggc gtagggcgg cccattccc agctctct ccgtgtgaca tgggtcccta gttgtgttc tgggtctc cattcttc cagggggtt gttctccga gcccgggca cgggggaatt tctgtatt tcatcagggg gcatgttgg tctgttgg gggaatttc tttagggga ggcgttgggg cttctggcag ttagcttctc tctgggcca cttccctca cacacacac ccctcggc ggaattc</p>	P	Homo sapiens
531	160889	Platelet Activating Receptor Homolog (H963)	NM_013308		<p>MQVPNSTGPD NATQLMLRNP AIAVALPVVY SLVAAVSPG NLFSLWVLCR RMGPRSPSVI FMINLSVTDL MLASVLPFQI YYHCNRHHWV FGVLLCNVVT VAFYANNMYSS ILTMTCSIVE RFLGVLPLS SKRWRRRRYA VAACAGTWLL LLTALSPLAR TDLTPYVHAL GIITCFDVLK WTMLPSVAMW AVFLFTIFIL LFLPFTIV ACYTATILKL LRTEAHGRE QRRRAVGLAA VLLAFVTCF APNPFVLLAH IVSRIFYGKS YYHVYKLTLC LSLNNCLDP FVYVFASREF QLRRLREYLG RRVPRDRLDT RRESLSART TSVRSEAGAH PEGMEGATRP GLQRQESVF gaattcggcc aagaaggctt agtctctct gtagagctg agcaaggctt gctgtggctc acagaagata gcccagggt tttgggggg ttgttaggt gattctgga ttagcttctc ttagcttga ttagcttga ttagcttga ttagcttga ttagcttga ttagaaatt ttctttca alaaaggc atcttact tccctcaga tgaacaacag ttgcttctc tggccagtt alaaagatt ggagccattc acgtatttt ttattgt ttctgtt ggaattat ggaattgt tgaacatt gctttttac agagaatc gaatcacagg ttgttggga tttactaat ttattgtt acagccgatt tctgtttac tctgtttac ctaggggaaa ttgttggga cttgggttgg gcatcttgg agcttgaagat attccactg caaglaacag cctgtccat ctatcaat agttattat caattact cttagcatt gtagcattg accgttct ttagcttga cagcttga cagcttga cagcttga cagcttga cagcttga ccaaatgat alcaacgtt gttgttga tgggtctt taaatggg ccaatata gatttccat caaagacalc aagggaaggt caaattggg ttgttggg tttaaaagg aatttggag aatttggag ttgttga atttcatat ttgttga ttgttga tctcagccat catttata tccattgoc ttgtattc agagcttca agaaacaaag alaaagaaa ttacccaaat gtagaaagg ctctcatca calacttta gtagccagg gttacatc atgtttgt cttacaca ttgtccaat cccgttacc ctacggcaga cagaaagcat aactgttgc tcaaccagg ttacattt caaagccaa gtagggctac tctgttggc ttgttggc cttgttgg atcttactt gttactac ctctcaaa gttccgtc aagggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt gtaggtt aattatgct ttgaagata aaaaaaaa aagaaggcc gc</p>	A	Homo sapiens
532	160889	Platelet Activating Receptor	NP_037440.1		<p>MTNSSFFCPV YKDLPEFTYF FYLVFLVGII GSCFATWAFI QKNTNHRVCS IYLNLLTAD FLTLALPVK IVVDLGVAPW KLFHQQVT ACLYNNMYL SIIFLAFVSI DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLIMVPMN MIPIKDIKEK</p>	P	Homo sapiens

535	161214	Galamin Receptor GalR3	NM_003614	<p>KKRRSSLDGS ESAKTSLOVT NLVSAIVELY DSLTGVPLV VSFSLKSDS APPWMVLAVL WCSMAQTLILL PSFIWSCERY RADVRTVWEQ CVAIMSEEDG DDGGGDDYA EGRVCKVRFD ANGATPGSR DPAQVKLLPG RHMLFPPLER VHYLQVPLSR RLESHDETNI STREPGSFL HKWSSDDIR VLPQSRALG GPPEYLQQRH RLEDEEDEEE AEGGGLASLR QFLESGLGS GGGPPRPGF FREEITTFID ETPLPSPTAS PGHSRRPRP LGLSPRRLSL GSPESRAVGL PLGLSAGRRR SLTGGEESAR AWGGSWGPGN PIFPQLTL</p> <p>tccaaagagc ccgctgagtg ggggagagc tgaigccag aacattcac tggacagccc agggagagtg ggggcccgtg cagtgctgt ggtcttggc ctaacttcc tgcaggagc agtgggacat gggcctgggct tggcagtgct cctgagcct ggcccagtg cctggcagga cctggcagc accagagac tgcatact caactggcgg gggcagtgac tctgttcat cctgtctgc gggcccttc aggcacacat ctacacgctg gtagcctggc cctggcggc cctggcctgc aaggccggg acctgtcat ctactacc agtgcagcca gtagctttac gctggcctgt gctccgggg acaggtacct gggccgtggg caaccgtgc gctggcggc cctggcagc ccgcgtaacg ccgcggcgc agtgggggctg gttgggctgc tggcggcgt cttcggg ccctactca gctactagc caocgtgcg taccggcggc tggagctctg cgtgcacg ccggagagag cgcgccggc ggcctgggac gtagccact tgcctggccg ctactgtg cctggctggc tgggagagct gggctacggg cgcacgtgc gcttctgt gggccggcgg ggtccggcgg ggcggcggc gggcggaggg cggcggaggg cggcgggg cggggggg ggcagctgg cgggtggcgg gctctagcgg cctgtgggg gtcggcaca cggcctcalt cgtgtctt ggtaggggg cttgccttc agccggcca cctagcctg ccgctgggc tcaactggc tggcctacgc caactctgc ctcaaccgc tgcctacgc gctggcctg cggcacttcc ggcggcgtt ccggcggcctg tggcggctgg ggcggcggc ccgcacagt ggcggcggc cctggcggc cgttcggcgg cgttcctggc ggcacacgg ggcacacgg ggcacacgg ctaggggg gctgtgtgt ggtggcggc agggccggga gcccagggag ggaacggc acggcggag ggtctggcgg ggaggggaa aaacctggc gctgggac cgtctgt</p>	A	Homo sapiens
536	161214	Galamin Receptor GalR3	NP_003605.1	<p>MADAQNISLD SPGSVGA V PVVFALELL GTVGNGL VLA VLLQPGPSAW QEPGSTTDLF ILNLAVADLC FLCVVPFQA TTYTLDAWLF GALVCKAVHL LITLTMVASS FTAAVSVDR YLAVRHPLRS RALRTPNAR AAVGLVWLLA ALFSAPYLSY YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAVV SLAYGRTLRF LWAAVGPAGA AAAEARRRAT GRAGRAMLAV AALYALCWGP HHALILCFWY GRFAFSPATY ACRLASHCLA YANSCLNPLV YALASRHFR RFRRLWPCGR RRRHRARRAL RRVRPASSGP PGCPGDARPS GRLLAGGGQG PEPREGPVHG GEARGPE</p> <p>atgggcctga ccccccagtc cccggagcgc ttccctgggc tggccggcac cggcagctct gggccggagc cgtctggcgg ccccacgca accctcaaca gctctgggc cagcccggcc gaggccagct cctggagaga cctgggtggc accgggacaca tgggactct gctctggcc atgggcggtg tgggcgtgtt gggcgaacgccc tacagctgg tggctaccttg ccgtctcttg cgtgggttg cctcaltga cgtctacgtg gtaacacttg cgtggcggc cctgtgtac ctgtcagca tcccttcat cgtggccacc tacgtacca agggagtgga cttgggggac gtagggctggc ggtgtgtctt cggcctgggac ttctgacca tgcacgag calcttcag ctgacggca tggcagctga gctctagct gctggctgtc ggcggctggga caocgtggcag cggcccaagg gtaacggca gctgtggcgt cggggcactt ggtgtgtggc gctgtgtgc agctgtggc tgaigtggc cagcggctg gtaggggg gtcctggc cctgtgtg cccgtggg gcccggcggc caacggcggc tactgtacgc tgccttgc caccagcgc gggggggcgg ggtgtgtcat cgggctgtc taccggcggc tggccggc ctaccggc tcgagggc cctcttcaa gggggggc cggccggggc cggcggcgtt ggcctgtgtg ctgggagtg tgcctctt</p>	P	Homo sapiens
537	161221	Urotensin-II Receptor (GPR14)	NM_018949	<p>atgggcctga ccccccagtc cccggagcgc ttccctgggc tggccggcac cggcagctct gggccggagc cgtctggcgg ccccacgca accctcaaca gctctgggc cagcccggcc gaggccagct cctggagaga cctgggtggc accgggacaca tgggactct gctctggcc atgggcggtg tgggcgtgtt gggcgaacgccc tacagctgg tggctaccttg ccgtctcttg cgtgggttg cctcaltga cgtctacgtg gtaacacttg cgtggcggc cctgtgtac ctgtcagca tcccttcat cgtggccacc tacgtacca agggagtgga cttgggggac gtagggctggc ggtgtgtctt cggcctgggac ttctgacca tgcacgag calcttcag ctgacggca tggcagctga gctctagct gctggctgtc ggcggctggga caocgtggcag cggcccaagg gtaacggca gctgtggcgt cggggcactt ggtgtgtggc gctgtgtgc agctgtggc tgaigtggc cagcggctg gtaggggg gtcctggc cctgtgtg cccgtggg gcccggcggc caacggcggc tactgtacgc tgccttgc caccagcgc gggggggcgg ggtgtgtcat cgggctgtc taccggcggc tggccggc ctaccggc tcgagggc cctcttcaa gggggggc cggccggggc cggcggcgtt ggcctgtgtg ctgggagtg tgcctctt</p>	A	Homo sapiens

[illegible]

542	161251	Purineric Receptor P2Y10	NP_055314.1	<p>accctccgg attactatt acatcagcca ccactggcct ttccagagag ccccttgct gctcgtctc tacttgaagt alctcaacat gtaicccagc atttgctc tgacgtgcat cagtctcaa aggtgcttt ttctctcaa ggccttcagg gccagagagat ggaagcgttag gtacgagtgt ggcacagatg ctggcacttg gatcggttg gggactgctt gtttgccat tccatccg agaaacacag actiaacaa caacagctc tctttctg atcttgata caagcaaalgt aatgcagttg cgttgctcgtt gtagatata gtttgttagc ttgcaggtat tggatocca gtagatca tgcagtggtg taacttgaaa actactat cttttagaca gccacaalg gctttcaag ggacagtg gaggcaaaa gcatcggga tgggttcat gttgtcga gttcttca tctgtcac tctatcat attactta tttttac catgtaaag gaaacalca ttacagttg tccgtgtc cgaatgcac tgaattoca ccttttgc ctgtgcttg caagtctg ctgctttg gatacaatc ttattact tatgtctca ggtttctg accaatc cggccatggc agtttgtga ccgctccg cttcagag ggcagagtg gttcatcat gattggcaca</p> <p>MANLDKYTET FKMGSNSTST AEIYCNVTNV KFQYSLYATT YLIFPGLL ANSAALWVLC RFISKKNKAI IFMNLVSAD LAHVLSPLR IYYTISHHWP FORALCLLCF YLKYLNMYAS ICFLTCLSQ RCFLLKPR ARDWKRRYDV GISAAIWVV GTACLPFIL RSTDLNNKS CFADLGYQM NAVALVQMIT VAELAGFVP VIIAWCTWK TTISLRQPPM AFQISERQK ALRMVEMCAA VFFICTPYH INFYTMVK ETIISCPVV RIALYFHPFC LCLASLCLL DPILYYFMAS EFRQLSRHG SSVTRSLMS KESGSSMIG</p>	P	Homo sapiens
543	161293	G Protein- Coupled Receptor Ls161293 [Herpes virus]	NP_042597.1	<p>MATTSATSTV NTSSLATTMT TNFTSLTTSV VTTIASLVPS TNSEDDYYDD LDDVDYEEA PCYKSDTTRL AAQVVPALYL LVFLGLGN ILVVIIVRY MKIKNLTNML LLNLAISDLL FLTLFPWMH YIGMYHDWTF GISLCKLRG VCYMSLYSQV FCILLTVDR YLA VVYAVTA LRFRVTTCGI VTCVCTWFLA GLLSLPEFFF GHGQDDNGRV QCDPYYPEMS TNWVRRAHVA KVMLSLILP LLIMAVCYV IIRLLRRPS KKKYKARLI FVMVAYFVF WTPYNIIVLLL STFHATLLNL QCALSSNLDL ALLITKTWAY THCCINPVY AFVGEKFRRH LYHFFHTYVA IYLCYIPFL SGDGEKGGP TRI</p>	P	Equine herpesviri s 2
544	177147	Neuromedin K Receptor-Like (NK-4R)	NM_006679	<p>gcgagaaacc cgaatgaccg cggccacggc ggcctccgga ctgtccgct cctgcggcgt cctgcggcgt cggggcactc gggctggcc cccatggct cgcctggcgg gaaactgagc ggcggcgg gctgggggtg gcctggcgg gcctggcgtga ggaaacctgac ctctccccc gcctggcggc cgtcccgct cccggccccc tgggtgagcgc cctgcggcgg cccggccccc gcgcaaccgt tcttcagcc gccctggccc gttggcctct ggtcgtcgtg ctacggcgcc gttggggcgg tggcgggtct cggcaacctc gttgtgact ggalcgtgt gggccacag cgcagcggg cgggcaocaa ctctctct gttgaacttg cttcggccga cgcggccalg gcctggctca acgcgtgtgt caactalc tacggcgtgc acggagaggtg gtaactggc gccaactact gccgctoca gaactctc cccatcaccc cgtgtgtgc cagtcactac tccatgacgg ccatcgccgt ggacagatac atggccaita ttgacccct gaaagccagg ctgtctgcca cggccacccc gatcgtcat ggaagcatct ggatctggc atttactt gtaattctc agttctgta ttcaaaalc aaagtalc caggccgtac tcttgctac gttcagttgc cagaagttc aaggaacat ttacgtacc acatgactc calcgctgt gtttactgt ttcttgtct calcatgggc atcaata ccatagtgt aalcacgtc tgggagagg agatccagg agacacctc gaaagtaac agggagcagct gaaagggcag cggagaggtt taanaatgat gatactgt gttgtgact ttggcaltg ctggctggcc tatcacatc acttactct cacggccatc tatcagcagc tgaacaggtg gaaatalc cagcaggtct acctggccag ctctggctg gccatgagct cgaacalgia caaacccalc atctagct gttgataaa gaaatttgt gctggcttca agagggccti cggctgggtgc ctttccatc acgtctcag ctacagagag ctggagctca aagcaocagg gctocaccca atgcgacaga atgcgctata cacagtgaca agaatgtagt ccatgagcgt ggaattcgac tccacagtg gggacaggtgc cagggtocagt caccagaaaga gaaaggagagac caagagcaga</p>	A	Homo sapiens

545	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	<p>ttaaatataa taataatcat atgaaaaat</p> <p>MASPAGNLSA WPGWGWPppa ALRNLTSsPA PTASpsPAPS WTpsRPQpA HFLQPPWAV ALWSLAYGAV VAVVLGNLV VIWVLAHKR MRTVTNSFLV NLAFADAAMA ALNALVNFY ALHGEWYFGA NYCRFQNFEP ITAVFASIYS MTALAIDRYM AIIDPLKPRL SATATRIVIG SIWLAFLA FPQCLYSKIK VMPGRITCYV QWPEGRQHF TYHMIVIVLV YCFPLIMGI TYTIVGITLW GGEIPGDTCD KYQEQLKAKR KVVKMMIIV VTFAICWLPY HIYFILTAIY QQLNRWKYIQ QVYLSFWLA MSSTMVNPIL YCCLNKRFA GFKRAFRWCP FIHVSsyDEL ELKATRLHPM ROSSLYTVTR MESMSVVFDs NDGDSARSSH QKRGTTRDVG SNVCSRRNSK STSTTASFVS SSHMSVEEGS</p>	P	Homo sapiens
546	177168	Cysteinyl Leukotriene CYSLTI Receptor	NM_006639	<p>atgagatgaa caggaaatc gacagatcct tcgoccatc gccaligcac tatgagac ticcgcacac aagligiatc caccitgac tcatgact cigtigtagg ctcttggc aatggcttg tgcctatgt cctcaaaa acctatcac agatgacagc ctccaagta tacaigatia attagcagt agcagaicta ctgttgtgt gcaactgoc tctccgtgt gctatiang ticaaaagg cattggctc tttggtagct tcttggcgc cctcagcac talgttgt atgtcaacct ctatgtagc aictctta tgaacgccat gaggctttc cggtagcatg caatgttt tccagtcacg aacataatt tggtaaca gaaaaaggcc aggttgtgt ggttaggtat tggatmtt gtgatttga ccagtctcc atticaatg gccaaaccac aaaaaagta gaaaaalaat accaagtgct tggagccccc acaagacaat caaataaaa atcaltgttt ggtcttgcat tatgtgtcat tgttgttgg cttatcacc ctttgtta taataatgt cgtgtacaa atgatacatt tgaacttaact aaaaaaatca atgaaaaaaa atcgtcaag tcaataaaag gctalaggaa tgaatagtt cgtgaccgt gcccttttag tcagtttcat atccaagta ccatcaacct tcaitttta caaatgaaa ctaaaacctg tgattctgtc cttagaaagc agaaagcgt ggtgtatgac tigtcttgg ctgatacaa tigtgtctt gaacctctc tatattctt tcttgggggt aactttaga aaagcgtgc tacaatcaga aagcaatct tgcctcagct gactiaigta ccaagaaga aggcctctt gccagaaaa ggaagagaaa tatgaaagt atag</p> <p>MDETGNLTVS SATCHDITDD FRNQVYSTLY SMISVVGFFG NGFVLYVLIK TYHKSAFQV YMINLA VADL LCVCITPLRV VYVYHKGIWL FGDFLCRLST YALVYNLYCS IFFMTAMSF RCIAVFPVQ NINLVTKKA RFVCVGWIF VILTSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVLVLH VVSLFVGFI PFVITVCYT MILTLKKS MKKNLSHKK AIGMIMVITA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCCF DPLLFFFSGG NFRKRLSTFR KHSLSSTVTV PRKASLPEK GEEICKV</p>	A	Homo sapiens
547	177168	Cysteinyl Leukotriene CYSLTI Receptor	NP_006630.1	<p>ccacgcgtcc gcctagcttga cggctcgacc ggcagcgggt caggctccgg ctctctccc gctgcagcag ccgcgctgccc ggccccactg ggcctggatc cggcccccggc cccctcgga cgcctctgc cgcctccggc cccggccccc cggaccatgc gctggggccc cccaggggaa acccgaccgc gccaaaggcc agctctccc ggcggggccc ctcccggccc ccagctctc ggccggcgc ctgcgcgc gccagggcc ggcgtgagct ggaggggccat ggagcgcggc cgcggggc ggccgcctgaa cgttcggggg ggcctggcgg gcgaltgcgg ggcggcgggc ggaggcggc gctctcggc agccctggacc gcggctgg ccgcgtcat ggcgctgtc atcggtggca cgggtctgg caacgcgcgt gctatgctg cctcgtggc cgactgagc ctccgaccc agaaacatt ctctctgc aacctggca tctcgact cctcgtggc gctcttgc tccactgta tgaacctac gctctgacg gccgctggac cticggccc ggcctctgca agctatgct ggtatgtagc taactgtgt gcaactcct tgcctcaac atcggtcga tcaagtaaga ccgcttctg tgggtcaccc gaggcgctc ataccgggc cagcaggggc agcagcggc aagatgctg tgggtgggt gctggcttc ctgcgtgac gaccagccat cctgagcagg gtagactctt ccggggggcag ctccatccc gaggggccat gctatgcga gttcttac</p>	P	Homo sapiens
548	177191	Histamine H3 Receptor	NM_007232		A	Homo sapiens

[illegible]

551	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	<p>gogccaaocg cctggggccc ttgcctctt ggccttctt ctgtctctt cgtctgcccc gctctgctgc agttctcac ctggacgctt atgaaacctt actttggcca ggtgtgtgtc aagggccaaagg tgaagcgtgc gccggagatg agccgaaggct tgcctgctgt cggagggggc ttgtgggggg cctcgtgctt ctttctgtg gtgaacgtgc tgtgtgtgt gctctccat cggcgccac agccctgggc cctgtgctt gtccgtgtcc tgggtgagca ctccctgtt gctatctgc cgtctgtctt tgcctgcttc cttctgcttc tggccagcgg ggcctctca ctgacatcta cttgagggc aaggtgagggc tgcagcactg atgcccagggt gcttttggg tctctggca gctgtctta ggggtgagag</p> <p>MESNLSGLVP AAGLVPALPP AVTLGLTAA Y TLYALLFFS VYAQLWL VLL YGHKRLSYQT VFLALCLLWA ALRTTLFSFY FRDTPRANRL GPLPFWLLYC CPVCLQFFTL TLMNLYFAQV VFKAKVKRRP EMRGLLA VR GAFVGASLLF LLVNVLCVAVL SHRRAPQWAL LLVRVLVSDS LFVICALSLA ACLCLVASGR PPLASTWRPR</p>	P	Homo sapiens
552	180956	Lysophosphatidic Acid Receptor Edg7	NM_012152	<p>cttcttaaa ttctttcta ggaattcac ttctctca caatgaatga ggtgtcatal gacaagcaca tggactttt itaataagg agcaacactg alactgtga tgaatggga ggaacaaagc ttgtgtgt ttgtgtgt gggagctttt tctgctgt tttttt tctaatctc tgggtatgc ggcagatgc aaaaacagaa aatttcatt ccccttacc taccgttgc caattttag tctgtccgat ttctgcgt gaaatggcta tgaattctg agtttaaca caggccocag ttcaaaaact ttgactgtca accgctggtt tctccgtcag gggcttctgg acagttagct gactgtcc ctcaact tgcgtgtat cggcggtggag aggcacatgt caatcagag ggtgtgggtc catagcaacc tgaacaaaaa ggggtgtga ca tgcctatt ttctgtctg ggcacatgc attttatgg gggcggtccc caacatgggc tggaaatggc tctgcaacat cttgtccctg cctccattt cagcagggagt taccgttt tctggcaggt gtcaacatc atggccttc tcatcaggt tgtgtgtac ctgggtat acgtgtacgt caagaggaaa acaacgtct tgtctccga tacaagtggg tcatcagcc gccggagagac accatgaag ctatgaaga cgtgtgtac tgtttatgg gctgtgtgt talgtgtgac cccggggctg gttgtctgc tctctgacgg cttgaactgc aggcaggtgt gctgtcagca tgtgaagaagg tggttcctgc tgcctagcct gctcaactoc gtcgtgaacc ccatcacta ctctacaag gaagagaca tgaatggcac catgaagag atgaatcgt gcttcttca ggaagaacca ggaagggcgc cctctgcat cctctcaaca gttctcagca ggaatgtacac aggcagccag tacataagag atagtattag ccaaggtgtca gttgtcaata aagagcattc ctatctct gttgctctc ggcacacca ggtgtatgact gtttagg</p> <p>MNECHYDKHM DFFYNRSNTD TVDDWTGTLK VVLCVGTFF CLFIFFSNLS VIAAVKNRK FHFPHYLLA NLAAADFFAG IAYVFLMFT GPVSKTLTVN RWFLRQGLLD SSILTASLTNL LVIAVERHMS IMRMRVHSNL TKKRVTLLIL LVWALAIEMG AVPTLGNWCL CNISACSSLA PIYSRSLVF WTVSNLMAFL IMVVYLRY VYVKRKTNVL SPTSGSISR RRTPMKLMKT VMTVLGAFV CWTPGLVLL LDGLNCRQCG VQHVKRWFLL LALLNSVNP IYSYKDEDM YGTMKKMICC FSQENPERRP SRPSTVLSR SDTGSQYIED SISQAVCNK STS</p> <p>atggggcccc gtcagggcgt cttgtgggt cttgtgtga tggacttggc cgttggcgtgc ctatcaacg cactgtgt gctttgtgc gctacagcg ctgagctccg cactcagcc tcaagcgtcc tctgtgtga tctgtctgc ggcacctgc tgcgtggcgg gctgtggacalgc ccttcacgc tgcctgtgt gtaagcgtgg cggacacagt cggcgccocgg cgtatgocaa gttatggct tctgtggacac ctcttggcg lcaacgggg cgtgtgaaggt ggtgtggcgtg agcgagac acc agtgggtgtggc agtgggttc ccactgtgct acgcctggagc cttgcagacc cgtatagccg gctctgtcgg ggtgtgtgtcc tgggtgacagt cgtctggctt ctgagggcgt gctctgtggct tgggtacagc agcgtcttc ggtctgttc gctgtggcctg ccggccagac ctgagcgtcc ggccttccga gctttcacgg ccaacgtcca tggcgtggag ttggtgtgc cgtctggcgt gctctgtctt acctgtctt agtgtcaccc ggtgtggcagc agacatggcc agcgtatgta caccgtcac atgaaaggcgc</p>	A	Homo sapiens
553	180956	Lysophosphatidic Acid Receptor Edg7	NP_036284.1	<p>MNECHYDKHM DFFYNRSNTD TVDDWTGTLK VVLCVGTFF CLFIFFSNLS VIAAVKNRK FHFPHYLLA NLAAADFFAG IAYVFLMFT GPVSKTLTVN RWFLRQGLLD SSILTASLTNL LVIAVERHMS IMRMRVHSNL TKKRVTLLIL LVWALAIEMG AVPTLGNWCL CNISACSSLA PIYSRSLVF WTVSNLMAFL IMVVYLRY VYVKRKTNVL SPTSGSISR RRTPMKLMKT VMTVLGAFV CWTPGLVLL LDGLNCRQCG VQHVKRWFLL LALLNSVNP IYSYKDEDM YGTMKKMICC FSQENPERRP SRPSTVLSR SDTGSQYIED SISQAVCNK STS</p>	P	Homo sapiens
554	189873	G Protein-Coupled Receptor GPR78	AF411107	<p>atggggcccc gtcagggcgt cttgtgggt cttgtgtga tggacttggc cgttggcgtgc ctatcaacg cactgtgt gctttgtgc gctacagcg ctgagctccg cactcagcc tcaagcgtcc tctgtgtga tctgtctgc ggcacctgc tgcgtggcgg gctgtggacalgc ccttcacgc tgcctgtgt gtaagcgtgg cggacacagt cggcgccocgg cgtatgocaa gttatggct tctgtggacac ctcttggcg lcaacgggg cgtgtgaaggt ggtgtggcgtg agcgagac acc agtgggtgtggc agtgggttc ccactgtgct acgcctggagc cttgcagacc cgtatagccg gctctgtcgg ggtgtgtgtcc tgggtgacagt cgtctggctt ctgagggcgt gctctgtggct tgggtacagc agcgtcttc ggtctgttc gctgtggcctg ccggccagac ctgagcgtcc ggccttccga gctttcacgg ccaacgtcca tggcgtggag ttggtgtgc cgtctggcgt gctctgtctt acctgtctt agtgtcaccc ggtgtggcagc agacatggcc agcgtatgta caccgtcac atgaaaggcgc</p>	A	Homo sapiens

555	189873	G Protein- Coupled Receptor GPR78	CAC34041.1	P	Homo sapiens
<p> tecccgctgct cgcggacactg caaccagtg tggggacagg ctgctctatc tgcctcatc cagcagaagc agcgcgacca cggcgccacc aggaagatg gcatgtctat tgcgacctic ctatctct tggcccgta tgcatagaoc aggcctggcgg agctctgtcc ctctgacc gtagacccc agtggggcat cctcagcaag tgcctgaact acagcagagc ggtggccgac ccgttcaagt actcttgt ccggccggcg ttccgcaag tccctggccgg catgtgtcac catgtgtcga agagagaacccc ggcgccagca tccaccatg acagctctt ggaatgggc ggcattgggc accagctgct gaagagaacc ccggcgccag cgttaccaca caacggctct gtagacacag agaatgattc ctgcctgac cagacacact ga MGPGEALLAG LLVMVLVAL LSNALVLLCC AYSaelRTRA SGVLL VNL SL GHLLAALDM PFTLLGVMRG RTPSAPGACQ VIGFLDTFLA SNAALSVAAL SADQWLAVGF PLRYAGRLRP RYAGLLGCA WQSLAFSGA ALGCSWLGY S SAFASCSLRL PPEPRPFA AFTATLHAVG FVLPLAVLCL TSLQVHRVAR RHCQRMDTVT MKALALLADL HPSVRQRCLJ QQKRRHRAT RKIGIAIATF LICFAPYVMT RLAEVVFVT VNAQWGLSK CLTYSKAVAD PFTYSLRRP FRQVLGAMVH RLLKTRRPA STHDSSLDVA GMVHQLLKRT PRPASTHNGS VDTENDSCLQ QTH </p>					
556	189874	Neuromedin U Receptor 2	NM_020167	A	Homo sapiens
<p> atggaaaac ttcaagaatg ttcttggaic taaccagcaga aactagaaga tccattccag azacacctga acagcaccca gggatattctg gcttctctct gcggaacctcg gcgcagccac ttcttctct cgggtctcgt ggtgtatgt ccaatttg tgggtgggggt catggcaat tgcctgggtg tgcctggatg tctgcagcac caggctatga agcagccac caactactac ctctcagcc tggcgctc tgaacctcg gctcgtctcc ttggaaigcc cctggaggic tatgagatg ggcgcaacta cctctctg ttggggcccg tggcctgcta ctcaagacg gccctcttg agaccggig ctgcctctc atctcagca tcaacacgt cagcggtggag cgtatogtgg ccalctaca ccggtccgc gccaaactgc agagacacccc ggcggggccc ctacagatcc tggcaltcgt cggggcttc tccgtctct tctccctgcc caacacacg atccatggca tcaagtcca ctacttccc aatggctcc tgggtccagg ttgggccacc tgaagggtca tcaagcccat tggatctac aatttca tccaggctac ctcttcta ttctactcc tcccatgac tgtatcagt gctctact accctatggc actcagctc aagaagaca aatctitga ggcagatga gggaaigcaa atattcaaa accctgcaga aaatcagica acaagatgct gttgtctg gctatgtg ttgtatctg ttggggcccg ttccacttg accgacttt cttaagctt gggagagagat ggaatgaac cctggctgct ggttcaac tegtccatgt ggtgtcaggt gctctctt acttgagctc agctgcaac ccaattatct alaaactact gctcgcgc tccaggcag caitocagaa tgtatctt tcttccaa aacagtggga ctccagcat gaaccacagt tgcacctgc ccaagcggaac atcttctga cagaatgcca ctgtggag ctgaccgaag alataggicc ccaattcca tgcagatcat ccaagcaca ctctcactc ccaacagccc tctatga acagatga agacaacat atcaagctt ccaattaac azaactga MEKLQNASWI YQKLEDPFQ KHLNSTEYL AFLCGPRRSH FFLPVSVVVY PIFVGVIGN VLCLVILQH QAMKTPTNY LFLAVSDLL VLLGMPLEV YEMWRNYPFL FGPVGCYEKT ALFETVCFAS ILSITTVE RYVALLHPFR AKLQSTRRA LRILGIVWGF SVLFSLPNTS IHGKFHYFP NGSLVPGSAT CTVKPMWY NFIIQVTSFL FYLLPMTVIS VLYYLMALRL KDKSLEADE GNANIQRPCR KSVNKMFLVL VLVAICWAP FHIDRLFFSF VEEWSESLAA VFNLVHVVS VFFYLSAVN PIYNLLSRR FQAAFNQNVIS SFHKQWHSQH DPQLPPAQRN IFLTECHFEV LTEDIGPQPQ CQSSMHNSHL PTALSSEQMS RTNYQSFHN KT </p>					
557	189874	Neuromedin U Receptor 2	NP_064552.1	P	Homo sapiens
558	189884	G Protein- Coupled Receptor	LG94108	A	Homo sapiens
<p> atgctggcag ctgccttgc agacttaac tcaagcaga tgaatgtc ctgtctcac ctccacttg ccggaggga cctgcctct gattccagg actggagaac calcatcccg gctctcttg tgcctctg cctgttggtc ttgtggga accgtgtgtg </p>					

Ls189884

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catgaagggg acacagctcc tctgtacag gataatgacc ctatccctg ggaacatgaa gatacaga gaa caggggagagg
tgttaaatag

559 189884 G Protein-Coupled Receptor 67 Ls189884 ENSMPRT1140 P Homo sapiens

MLAAAFADSN SSSMNVSAH LHFAGGYLPS DSQDWRTP ALLVAVCLVG
FVGNLCVIGILLHNAWKGP SMHSLNLNL SLADSLLLF SAPIRATAYS
KSVWDLGWTF CKSSDWFHT CMAAKSLTV VVAKVCFMYA SDPAKQVSIH
NYTWSVLVA IWTVASLLPL PEWFFSTIRH HEGVEMCLVD VPAVAEEFMS
MFGKLYPLLA FGLPLFFASF YFWRAYDQCK KRGTQTQNLNR NQIRSKQVTV
MLLSIAISA LLWLPEWVAV LWWVHLKAAG PAPPGFIAL SQVLMFSISS
ANPLFLVMS EEFREGILGV WKWMITKPP TVSESQETPA GNSEGLPDKV
PSPESPASIP EKEKPSSPSS GKGTKEAEI PILPDVEQFW HERDTPSVQ DNDPIPWEHE
DQETGEGV

560 189895 G Protein-Coupled Receptor GPR61 NM_031936 A Homo sapiens

atggagctct caccatccc ccagatcaca gggaaactct ccacttgagg gagggtccct caaacccacag gtccctctac
tgccagtgagg gtccggagagg tgggctacg ggaatgtgtc tgggaatctg tggccctctt ctacagctc ctgtggact
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gactggctgt cctctgagt cctgggttc ccgaccctca ccaagccca agcagggagcc accgtgtgtt gactctgaa
tcaggagcag atag

561 189895 G Protein-MESSPIPQSS GNSSTLGRVP QTPGPFSTAG VPEVGLRDVA SESVALFFML NP_114142.1 P Homo sapiens

sapiens	<p>LLDLTAVAGN AAVMAVIKTPALRKFFVVF HLCLVDLLAA LTLMLAMLS SPALFDHALF GEVACRLYLF LSVCFVSLAI LSVSAINVER YYYVVPMPRY EVRMTLGLVA SVLVGVVWKA LAMASVPLG RVSWEEGAPS VPPHCSLQWS HSAYCQLFVV VFAVLYFLP LLLILLVYCS MFRVARVAAM PDGPLPTWME TPRQSELS SRSTMVSSG APQITPHRTF GGGKAAVLL AVGGQFLLCW LPYFSFHLVY ALSAQPISTG QVESVVTWIG YFCFTSNPFF YGCLNRQIRG ELSKQFVCFK KPAPEEELRL PSREGSIEEN FLQFLQGTGC PSESVWSRPL PSPKQEPFAV DFRIQAR</p>	Coupled Receptor GPR61	
Homo sapiens	<p>A atggagtcgg ggcctgtcgg gccggcgccg gtagagcgagg tcatgtctt gcatcaaac tacaccggca agctccggcg tgcggctac cagccggggg cggccctggc cggcgagccg gtagtgccg tggcggtggc cggcttcaic gtagtagaga atctagccgt gttgtggg ctggagccgc acccgccgt ccagctccc agtctccg tctggggcag cctcacgtg tggatctgc tggcaggccg cgcctacgcc gccaatcc tactgtggg gccgctcacg ctgaacagt ccccgccgt ctggttggca cggcgaggagg gctgttctgt ggcactcat ggcctggc tggcctctt ggcctacggc ctggagcgca gctcaacal ggcggcgagg gggccggcg ccgcttccag tggggggcg acgctggcga tggcaggccg ggcctggggc gctgctgc tctcgggct cctggcagg ctgggctggga atgctggg tggctggg gcttgcctca ctgtctggc gctctacgc aaggcctacg tgcctctg cgtgctggc ttgggggca tctggcgcg gactgtgca ctctacggc gcatctag ctagggacg gccacggcg ggcggccggc ggcggcgcc ggcactggcg ggcacacct gaccggggc cgtcgcaagc cgcctctgt ggccttctg cgtacgctca gctgggtgt cctggcttt gtagcattt gggggccct ctctctgt cgtgtctg acgtggcg cccggcg accgtctgt tactcttga ggcggatcc ttctgggac tggcctggc caactctt ctgaaccca tcatctac gctacacac cggagacct ggcacggct cctggcgctg gctgtggc gacggcac ctgcggcaga gacggagg gctccagca gtcggcgagc ggcgctggag ctccggggg cctggcgcc tgcctggcc cggggcttga tgggagcttc agcgctcg agcctcaic gccacagcg gacggcggg acacaggc ctcacagg agcccggg caccacag cggcgagct ctggatcag aacggcgct agactga MESGLRPAP VSEVIVLHYN YTGKLGARY QPGAGLRADA VVCLA VCAFI VLENLAVLV LGRHPRFAP MFLLLGSLTL SDLLAGAAYA ANILSGPLT LKLSPAL WFA REGGVFALT ASVLSLLAIA LERSLTMMRR GPAPVSSRGR TLAMAAAAG VSLLLGLPA LGWNLGLRD ACSTVPLYA KAYVLCVLA FVGILAAICA LYARIYQVR ANARRLPARP GTAGTSTRA RRPRLSALL RTL SVVLLAF VACWGPLFL LLDVACPAP TCPVLQADP FLGLAMANSI LNPIYTLN RDLRHALLRL VCCGRHSCGR DPGSQSQSAS AAEASGLRR CLPPGLDGSF SGRSSSPQR DGLDTSSTG SPGAPTAART LVSEPAAD</p>	NM_030760 Sphingolipid Receptor Edg8	189900
Homo sapiens	<p>P gttgaggcac cgtgtgtcgg cctgttctt caggccaga ggcggcagc ccttaccoc acagcgctgc agccctggcag ctggcccca gccggggag gaccttctt ttccaga gactctggcc tgcatttca gcttccctat ggcctccgoc ttccagag cctccggta ggcacatgc ctggagggtt gtagagggt ctcgtctc actgggctt gccggcccg cgtgaggccc agcacaggccc ggcctgtggg gtagggagt ggcctaggag cagcagtagag cagcggtgoc aggcactgt tgaaggagt gtagggcagg gtagcattgga agactgtgt gtagagggtt agggatcggc aggcggcagc ctaggaagcc accatggagg ccatggcaga gtaggtgt gtagagggtt ctagggcacc accatggcca gtagcagctat ggcctctgc ggcctgtct gccggccag accaggttc ctaggggtt ggcactgt cacaatgt cacaatgt aagaggatga ggcctagtgg cagggaagac tccagaggt acatgtctt gtagggcg agcggaggcc aggggtctgt gccacccg tagcttaggg agggggggc gtagagggt cttagggca ggttccgt gtagggcag atggccacc agagtccccc</p>	NP_110387.1 Sphingolipid Receptor Edg8	189900
Homo sapiens	<p>A LG94029 G Protein- Coupled Receptor Ls189901 (HEOAD54)</p>	189901	564

565	189901	G Protein- Coupled Receptor Ls189901 (HEOAD54)	CAC38933.1	<p>ggccaccgg gcaagctggcc acggctctcagc acggggggg gctggaccac ctacaggtag cgggttagtg cgtatggctgt gaggagagaca acgctggccg tgcgggtggg gggacagcatg aaggaggtga cttggcaggc agcaoccca aagggccagg tctatggag gaggtagtag tccagcagg ggggcaaggt gctgatcagg aggaagctcag cggccaccag gctgaccagg aacaccgtgt tggaggtcca gggccggcgg tggatgcaga agatgaagag gggcaaacctg ttcccacca ggccaggagc aaactccagg ggcaggatg gggcaggaga ggcagacacc agcgaggag aggtggggg gcaaggccct ccaggagacc cccaccaggt ggtaaggc</p> <p>MELHNLSSPS PLSLSSVLP SPSPSPSSAP SAFTTVGGSS GGPCHPTSS LVSFLAPIL ALEFVLGLVG NSLALFICI HTRPWTNTV FLVSLVAADF LLISNLPRLV DYLLHETWR FGAAACKVN FMLSNTRTAS VVFLTALN RYLKVQPHH VLSRASVGA ARVAGGLWVG ILLNGHLL STFGSPSCLS YRVGTPKSAS LRWHQALYLL EFFPLALIL FAIVSIGLTI RNRGLGGQAG PQRAMRVLAM VVAVYTICFL PSIFGMASM VAFWLSACRS LDLCTQLFHG SLAFTYLSNV LDPVLYCFSS PNFLHQSRAL LGLTRGRQGP VSESSYQPS RQWR YREASR KAEAIKGLKV QGEVSLKEG SSQG</p>	P	Homo sapiens
566	189904	Purinergic Receptor P2U2 (GPR91)	NM_033050	<p>gggtatgggt taactcagca gaattgttg aacactacg acatgctggg gatcatggca tggaaigcaa ctggcaaaa ctggctggca gcaagggcgg cctggaaaaa gtaactct tocatitit atgggati ga tgcgtgtg ggaagcttg gaaatccat tgggttiac ggcatact tctctgaa gaaatggac agcaglaala ttaactct taactctt gtcctgact tagctttct gtgcacccct ccatgctga taaggagata tggcaatgga aactggatat atggagact gctcggcala agcaacggat atggcttca tgcacaccc tataccaga tctcttct cactttatc agcatagac galactgat aattaagiat ctttcogag aacacttct gcaaaagaaa gagtttgcta ttaactc ctggccat tgggttiag taacttiaga gtiatacc atactccc ttaataatc tttataact gacaatggca ccaccigaa tgaatttgca agttctggag accocacla caactcat tacaagatg gtctaacact gttggggct ctatcttc ttgtgat gttgttct tatataaga tggctctt ctaaaagcag aggaataggc aggttgctac tgcctggcc ctgaaagc ctcaactt ggtcatcag gcaagggtaa tctctctg gcttttaca cctatcacg tcatgggaa tgtgaggatc gcttcagcc tggggaggtg gaagcagiat cagtgccac aggtcgtcat caactctt tcatigga cagggctt ggccttctg aacagigra tcaacctgt cttatit ctttgggag atactcag ggcacgtc atgaatac tgaagacaaa ctcaaatc ctatcatct ttacagatg ggcataaga cttctacti catcagaga aaggtgagg gcttgigaaa cagattgtc tacaatgaa tctgaaagc agtiacagt tgccttaact calagacatc aalacagagag tgcacagat ttaacctga tctaaagaca agttgtaacc agatgatg aaaaagatag gacgacaaga atgactgggt ttctctct aagaattgaa aggaattgaa ctgcctatg ttgggcag taactccaaa atactaggta gataaggct ttctaatca gtgcaaaaal ggaagatata, taagcaaca agttgtctg attgatcac tggcagatt gtaaaaaaa aaaaaaaa</p> <p>MAWNATCKNW LAEEAALEKY YLSIFYGIEF VGVLTGNTIV VGYFSLKN WNSSNYLFN LSVSDLAFLC TLPMLIRSYA NGNWIYGDVL CINSRYVLHA NL YTSILFLT FISIDRYLI KYPFREHLLO KKEFALISL AIWVLVTLEL LPILPLNPV ITDNGTTCND FASSGDPNLYSMCLTLL GFLPLFVMC FFYKIALFL KQNRQVATA LPLEKPLNLV IMAVVIFSVL FTYHVMRNV RIASRLGSWK QYQCTQVVIN SFYIVTRPLA FLNSVINPVF YFLLDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK</p>	A	Homo sapiens
567	189904	Purinergic Receptor P2U2 (GPR91)	NP_149039.1	<p>ggagaccatg ctctcgggc tctccggc ggcggccgc gctggccctc gcttaggca aagagactt tggggaagat ggaaactcat gtcatttc cagaatgat ttcaagcc atcaatggga cctgatactg ctgtctgtg ttgaatgct tgaagaactc ctgcactct gctgcatct tcatctac tgaacacag gctctcgg caggtgtgac tgcgttcat accgggacat ccaacacac</p>	P	Homo sapiens
568	189920	G Protein- Coupled Receptor GPR63 (PSP24)	NM_030784	<p>ggagaccatg ctctcgggc tctccggc ggcggccgc gctggccctc gcttaggca aagagactt tggggaagat ggaaactcat gtcatttc cagaatgat ttcaagcc atcaatggga cctgatactg ctgtctgtg ttgaatgct tgaagaactc ctgcactct gctgcatct tcatctac tgaacacag gctctcgg caggtgtgac tgcgttcat accgggacat ccaacacac</p>	A	Homo sapiens

(bela)

attitigcigc latgaaacaa cctacatgaa tatiacatc cctccacatc tccatgcatcc tgaactcagc ccatigctta gatatagitt
tgaacacatg gctcccatg gntgagcigc ctigacccgig aatagatagcag ctigcgcacac aacacacagca gcatitaaaga
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agactttt ttctggaa gacatcctg ctttaccat ccatggag cc

569 189920 G Protein- NP_110411.1
Coupled Receptor
GPR63 (PSP24
bela)

P Homo
sapiens

MVFSAVLTAF HTGTSNTTFV VYENTYMNIT LPPFQHPDL SPLLRYSFET
MAPTGLSLT VNSTAVPTTP AAFKSLNPL QITLSAIMIF ILFVSFLGNL
VVCLMVYQKA AMRSANILL ASLAFADMLL AVLNMPEALV TLTRWIFG
KFCRVSAMF FWLFVEGVA ILLISIDRF LIIVQRQDKL NPYRAKVLJA VSWATSFCA
FPLAVGNPD QIPRAPOCV FGVTNPGYQ AYVILSLIS FFPELVILY SFGILNTRL
HNALRIHYP EGICLSQASK LGLMSLQRPF QMSIDMGFKT RAFTTILLF
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570 189945 G Protein- AK027843
Coupled Receptor
Dj287g14.2

A Homo
sapiens

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NTKVLTFISY ICGGSAIFS AATLLTYVAF EKLRDYP SK ILMNLSTALL FLNLLFLD LG
WITSFNVDGL CIAVAVLLHF FLATFTWMG LEAHMYIAL VKVFNTYIRR
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Homo sapiens

Homo sapiens

P

A

571 189945 G Protein-Coupled Receptor Dj287g14.2 BAB55406

572 190026 G Protein-Coupled Receptor JEG18 NM_032553

573	190026	G Protein- Coupled Receptor JEG18	NP_115942.1	<p>aactccgctt ctgatgtacc taatgtatc ctggaaagac gttttatcac tgcagaataa alalcccac tgcacaagalc ttggagagagaa acagaaagcc ttgaagatga tctaaacctg tgcaggaggta ttctaattt gcttgccacc ttaatcatic agttttctt tagatttct ggtagagctc aaigaaatta aaagctgctt agccagaagg gtgtattctaa tatcttcaa ttgttgcatg tgcctgcta gcttgaaatc atgtctgac ccagctcatat actactttc cactaaagac ttccgaagag ggctttcaag gctttcaag calgacagca tccaactoca tgcaaaalcc ttgtgtgta accatlaacg ttccaccatg acacciatat taigtctaaa caaaaaacca aacigaaatg gacctgaat gcaagtacat cagaacalat ctgcaatacc caagccacag gggaagaact gcaaaacaac acagcttttc agttctgctc taactactg ctatggaggaa ttactctt caaagcagag cctattgga gcaattacgat ccacgtatlat tgaigtgac atgccatgt agtaattt cttaag</p>	P	Homo sapiens
574	190031	G Protein- Coupled Receptor VLGR1	AF055084	<p>MPANYCTRP DGDNTDFRYF IYAVTYTVL VPGLIGNILA LWVFGYMKKE TKRAVIFMIN LAIADLLQVL SLPLRIFYL NHDWPFPGGL CMFCFYLKYV NMYASYFLV CISVRFWFL MYPRFHDCK OKYDLYISIA GWLIICLACV LFLRLTSDS TSGNRKTCFV DLPTNRNVLA QSVVMMTIGE LIGFVTPLLI VLYCTWKTVL SLQDKYPMAQ DLGEKQKALK MILTCAGVEL ICFAPYHFSF PLDFL VKSNE KSCLEARVI LIFHSVALCL ASLNSCLDPV IYFSTNEFR RRLSRQDLHD SIQLHAKSFV SNHTASTMTP ELC</p> <p>attactglat agtatglat tcaagcagga ttccaaaagg ttcaattat gacagcalct ttctgattc ctacagattt attacttcc cattgcccac gtttagaac ttatatag ttggcttc gtaacagcac cactcattgg gacacacaca gaaatctgt tcaaaacalc atttcaggaa aagaagataa tttagctt gtaggtattt aagaatgag cagtacttia tagaactaag ttgtagagagc taagagagac tttaaitca tgcatagcaa ttatgatt ttgtgttg ttgatitia ttatattg attgtatga ctttggaagga gggtatgatt ttaccatca agaaaatgga ctacagatag atcaactcc tgaataagaa aacatctoca ttgtgcac cataataag aaaaatgata acgcagaaagg calcatgaa ttgacocaa agtatactgc ctgcgaagtg gaggaaagtg ttggcgctgat calgatccca gtgtgtaggc tacatggaac ttatggctat gtagacgctg attacttc tcaagctcc ctgcccagc ccgagaggtgt tgaataat ttgcalggca gtaacgtcac cttaacgat gggcgaact taagttaa aatatctc atcattgag acaatgaaag tgaatttgag ggccocattg aaatitact cacttgtagct acttggaagg cggtctctgg gcgccacctt gtagagcagaa tcaataagc taagagtgac tctcccttg gtagtatag gtttctaat caaagcaaaa ttctatgc taatoccat tacaacatga tttaact gggtctggtag cggtctggtag agtagatcag gtgaactggg agacagtagg accaactct caagaagctt tactgccaca gaataagag acgtgagcagc gttgtctat ttggagag agaaaggaggg agtgagaac alaattctga caatctac tcatgaagaa atgaaatg agtagacat catattaaa cttaacttg tgaagagagaa agctaaata gactccagag ctaaaagatg tacatnaac atacaagat ttgtgtagcc aaatggagt gttaagttg ctctgaac ttgtctag aaagcttatt cagaactct ggctctgaaa ggccocctgc tcaatccti cttaagaa agagtcaggg gcaaccttgg agagatatag gtttactggg aaataagtag tgaattgac attactgag actttcttc caccagtgga tttaacca ttgctgtagg agtagagtag gctagctttg agtttcaatt gctaccagat gtaggtaccg agtagagagaa agatlatag atocagcttg ttctgtaga gggaaggagcc gaactggatc tggagagag latacatgg ttctgttt atgcaaaiga tgaocacat ggagatgg ccctgtatc gtagtgcag tcaactia tggggcagaa ccttattaga tcaatcaaa taacalaac ccggcttgc tgaacattg gtaggtggc tgttggctt cgaatcat cggatcataa agacagcccg attgtaacg aaaaigcaga gtaggcagctg gtgtcaaaag atgtgtgccc atataagtg gacgtgtgic caataagaa tcaagcttc ctactcag gcttaatt cacttgcaa ctgtgtgactg tgaactgt cggttgagcgt ttctatgaaa tgcacaacat tcttcaagaa gcaaaaatcig ctgtctoc agtctgag aaagctgcca atitcaaggt cggtatgaaa tccactgt ttcaactat gaaacatcat gctggcagaa gccaactttt gattttagg agtagacat atgtagctct ctctggtagc tggacacatg gatatgctcc tgggttaagaa attcctgaat tcatgtgt tggcaacatg accacaacac tggggagct ttcaattcc cagctgtag aagtggaagg agttttctg tggacgttc ctgacctgg</p>	A	Homo sapiens

[illegible]

575	190031	G Protein- Coupled Receptor VLGR1	AAD55586.1	gagagactac acaatgacct cagacacttc tggatgttgg ttctcttgt cattitcaac agtctgcagg gactitagt ttcatgtt tatitcatt tacacaacca aatgtgttc cctatgaagg ccagtacac tgggaatg aatggcatc ctggaccag cacagcctt ttacgccc-g ggaatggaaat gcccttgc tggagggaat tcaagcagtc caccagaat ctatcgggt ctatgaga gggtccact gactggaga gactccctt ccaacaggcc agtcaagcca gccctgatt aagaccagaat ccacaaaatg gagccagct cccgtctct ggaggatag ccacaggggt actgtagcc gatgagagat cccagaggt ttgatgatta aatgtcat taaaaactgg tctgtctc agtgcagtg ataagaatc tggtaagtc agocaggagg ggggacctt gactgacct cagatcgtgg agtcaaggag gataccact gccgacact accgtgagca cctcctaac catcgactg agcacactt calattgta tcaatttg tctaaaact ctctaagtc atccactgt gtaataagaa cctgtgaatt gtactgag attaataca acgtgattgt tgaattgga gataaaita ctgattgat gtaactgaa aattcacgc tataagaag gggagtcag tttgcag ttaatagat gtaatttc caaggat agttgttt taaatcacc taaatgcta acattgta algaagaa taatcaataa agcaatagaa tct	P	Homo sapiens
				MQLCIFCCC ILFYFDLYDF GRGYDFTQEQ NGLQIDQPE IGNISIVRII IMKNDNAEGI IEFDPKYTA EVEDVGLIM IPVVRHLGTY GYVTADFISQ SSSASPGGVD YILHGSTVTF QHQQNL SFIN ISIDDNESE FEEPIELLT GATGGAVLGR HL VSRILIAK SDSPFGVIRF LNOQKISIAN PNSTMILSLV LERTGGLLGE IQVNWETVGP NSQEALLPQN RDIADPVSL FYRGECEGV RTIULTYPH EEEVEETFI IKLHL VKGEA KLDRAKDV LTQEFQDPN GVVQFAPEITL SKKTYSEPLA LEGPLLTFF VRRVKGTGGE IMVYWELSSSE FDITEDFLT SGFTTIADGE SEASFDVHLL PDEVPEIEED YVIQLVSVEG GAELDLKESI TWFSVYANDD PHGVFALYSD RQSLIGQNL IRSIQNITR LAGTFGDVAV GLRUSSDHKE QPIVTENAER QL VKKDGYATY KVDVVPKNG VFLSLGSNFT LQLVTYMLVG GRFYGMPTIL QEAKSAVLVP SEKAANSQVG FESTAFQLMN ITAGTSHVMI SRRGTYGALS VAWTTGYAPG LEIPEFVVG NMTPTLGLS FSHGEQRKGV FLWTFSPGW PEAFVLHLSG VQSSAPGGAQ LRSGFIVAEI EPMGVFQFST SSRNIIVSED TQMIRLHVQR LFGFHSDLIK VSYQTTAGSA KPLEDFEPVQ NGELFFQKFQ TEVDFEITL NDQLSEIEEF FYINLTSVEI RGLQKFDVNW SPRLNDFS AVITILDND LAGMDISFPE TTVA VADTT LPVETEST YLSTSKTTTI LQPTNVVAIV TEATGVSAIP EKLVLHGT AVSEKPDVAT VTANVSHGT FSLGPSIVYI EEMKNGTFN TAEVLIRRTG GFTGNVSTV KITGERCAQM EPNALPFRGI YGISNL TWAV EEDFEEQTL TLFLDGERE RKVSQILDD DEPEGQEFFY VFLTNPQGA QIVEGDDTG FAAFAMVIT GSDLHNGIIG FSEESQSGLE LREGAVMRRL HLIVTRQPNR AFEDVKVFWR VTLNKTVVVL QKDGVLNLEE LOSVSGTTTC TMGQTKCFIS IELKEKVPQ VEVYFFVELY EATAGAANN SARFAQIKIL ESDSQSLVY FSVGSRLLVA HKKATLISLQ VARDSTGLM MSVNFSTQEL RSAETIGRTI ISPAISGKDF VITEGTLVFE PGQRSTVLDV ILTPETGSLN SFPKRFQIVL FDPKGGARD KVYGTANITL VSDADSQAIW GLADQLHQPV NDDILNRVLH TISMKVATEN TDEQLSAMMH LIEKITTEGK IQAFSVASRT LFYEILCSLI NPKRKDTRGF SHFAEVTEF AFSLLTNVTC GSPGEKSTI LDSCPYSIL ALHWYPOQIN GHKFEKEGD YIRPERLLD VQDAEIMAGK STCKLVQFTE YSSQWFFISG NNLPTLKNKV LSLSVKGQSS QLLTNDNEVL YRIYAAEPRI IPQTSICLLW NQAAASWLSD SQFCKVIEET		

Accession	Gene	Protein	UniProt ID	Species	Sequence
576	190168	G Protein-Coupled Receptor GPR58	NM_014626	Homo sapiens	ADYVECACSH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHF CARYSMFAAK LLTHMAASL GTQILFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVLLI VILKGIYHQS MSQYGLIHG DLCFIPNYA ALFTAALVPL TCLVVVVFV IHAYQVKPW KAYDDVFRGR TNAAEPLIL YLFALISVTW LWGGLHMYR HFWM LVFVI FNSLQGLYVF MYYFILHNQM CCPMKASYTV EMNGHPGST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLL PSPQNGATP SSGYGQGS LIADEESQEF DLI FALKTGA GLSVSDNESG QGSQEGGTLT DSQVELRRI PIADTHL algaatcat ttagtcagg atccataat atcaataat tggcaatc tgcataat attccatt octactca ggaatcac acocaaoca actictact cctctccag gcatcactg attctctt gggatcac atcagccat atagatcat cagaatggg gagaactcgt gctatttgg gctacatt tgcagatt attatagtt tgaactgag cttagcataa calccattt tcaatctg tcaatggcca ttgatatt ttatgata ttgtacccat tactttat caccataata actattccag tcaataaag atgtactt ctaattgt cggccctgg agcaatgcc ttggggcgg ttcttcaga ggcctalga gatgaalag agggatga caatctgt gctgttoca gttctgcc agtattgic aacaagctat gggggacac atgtttat gcaatgtt tcaatctgg gtatgagat gggggatt acggcaaat ttggcaga tocagaanaac atgctatgc catcaataac ttgcggagaa atcaataata tcaatgaag aaagacaaaa aagtgcoca aactttagga atagatag aggtttct attatgnt ttactgt ttctacat ttatgtat ccttttga actictac tctgtagt ttgttag ccttgacat gtttgcat tttaactca catgaatcc gttaataat ggtttctt atccctgt tgcgagaga ctgaagata ttgttagg taaatttc agtcatgt tcaataac tatttgt atgcaaaaag aaagttaga g MYSEMGASIF ITIFGNLAMI ISISYFKQLH TPTNFLLSM AITDFLLGFT IMPYSMIRSV ENCWYFGLTF CKIYVSFSLM LSITSIFLCL SVAIDRFYAI CYPLLYSTKI TIPVIKRLLL LCWSVPGAFV FGAVFSEAY A DGIEGYDILV ACSSSCPVMF NKLWGTTFM AGFTTPGSMV VGIYKIFAV SRKHAHAINN LRENQNNQVK KDKKAATLG IVIGVFLCW FPCFTLLD PFLNFSTPV LFDALTWFGY FNSTCNPLYI GFFYPWFRRA LKYLLGKIF SSCFHNTILC MQKESE atgcatcaa ctatattc cgaagacta tccattgic caaaattgt aaataagac ctgctccc accaacgct ctctcatg ccaggatga atgattcgg ttatgctgg agccatgt accatatt cggaaactg gtaataagg ttctatac gattcaaa cagcttcat ctccacaaa ctctgac ctctcattg caaccagga ctcttgct gggttuga ttatgcala cagcataag cgatcaggg agatgtctg ttacttgg gattgcttt gtaattoca caaagcti gcaatgac tgaactgac ctcatctc cactctgt ccatgtcat tgaactgt tggcgtgt gttacoccti acataacca accaaaalga cgaatccac cataaagcaa ctgtggcat ttgttgct agttctgt ctitttt ttgtttatg tctatgag ggcgtatgt ccggatgca gtagctaaag atactgt ctgtctca ttctgtcc ctacttca acaattct ggggacata ttgtcata calgtttt tactccctgg tccatcag ttgtattia tggcaaac ttatgttt ccaaacagca tctctgac atcagccatg tgcctgaana caaaaagggg gcaatgaana aaaccatc caagaaaaa gacaggaag cagcgaag acaggatata gtaatggggg ttgtctgg ttgtgtgt cctgtttc ttgtgtct gattgaca taactgact actocact cataacta ttgatctt tagttgtgt ccgtactc aacttact gcaacctt tactatgg ttittaat calgttca gaaagcatic aagtacatag tgcagga aatattagc tccatcag aaactgaaa ttgtttct gaagcatt aa MDLTYPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSIHFQQLHSPTNFLI LSMATTDLEL GFVIMPYSIM RSVESCWYFG
577	190168	G Protein-Coupled Receptor GPR58	NP_055441.1	Homo sapiens	
578	190170	G Protein-Coupled Receptor GPR57	NM_014627	Homo sapiens	
579	190170	G Protein-Coupled Receptor	NP_055442.1	Homo sapiens	

581	190188	G Protein-Coupled Receptor LGR6	AAG17168.1	MRLEGERSA RAGQNLRSAG SARRGAPRDL SMNNLTELQP GLFHLRFLF EIRLSGNHLS HIPQAFSLG YSLKILMLQN NOLGIPAEA LWEPLSQL DLNYNKLQEF PVAIRTLGRU QELGFHNNNI KAPEKAFMG NPLLTQTHFY DNPIQFVGRS AFQYLPKLHT LSLNGAMDQ EFPDLKGTTS LEIL ILTRAG IRLPSGMCQ QLPRLRVLEL SHNQIEPLS LHRQCKLEEI GLQHNRIWEI GADTFSQLSS LQALDLSWNA IRSHPFAFS TLHSLVKLDL TDNQLTTLPL AGLGLMLHLK LKGNLALSQA FSKDSFPLR ILEVPIAYQC CPYGMCAEFF KASGQWEAED LHLDEESSK RPLGLLARQA ENHYDQDLDE LQLEMEDSKP HPSVQVCEPTP GPFKPCEYLF ESWGIRLAVV AVLLSVLGN GLVLLTVFAG GPVPLPPVKF VVGAAGANT LTGISCGLLA SVDALTFQGF SEYGARWETG LGCRTATGFLA VLGSEASVLL LTLAAVQCSV SVSCVRAYGK SPSLGSVRAG VLGCLALAGL AAALPLASVG EYGASPLCLP YAPPEGQPA LGLTVL VMM NSFCFLVVG AYKLYCDLP RGDFAEAVWDC AMVRHVAWLI FADGLLYCP AFLSFASMLG LFPVTPAEVK SVLLVVLPL ACNLPLLYLL FNPFRDDLRL RLRPRAGDSG PLAYAAAGEL EKSSCDSTQA LVAFSDVDLI LEASEAGRPP GLETYGFPFV TLISCCQPGA PRLEGSHCIVE PEGNHFGNPQ PSMDDGELLRL AEGSTPAGGG LSGGGQFQPS GLALLHTY	Homo sapiens
582	190414	G Protein-coupled Receptor GPR101	AF411115	algaagfcca ccagcagcagc ggaagagtaaca gcaagccacac gfigcagcccc ctctcaaaa tgcacatgac ccttgggccac ggcacatcc gctcaaacgt gctggtatc ttcttcocg cctcttctt cgggaacata gtcctggcgc tagtgrtgca ggcgcaagccg cagctctgtcgc aggtggaacca cgtttatc ttzaccctc tgcgtaocgca cctgtcgtcag atttcgtcgc tggccocctc ggtgtgtggcc accctcgtgc cctctctc gcccctcaac aggcactctt gcaaggccct ggtttagcttc acccaactgt tgccttcgc cagcgcgcaac accatgtcgc tggctgtcag ggaatgclac tgcgtaacca tccacctt ctctaacccg tccaaatgta cccacgcccgc cgtgttaocct ctctctatg gcaacttggat tgrtggccalc ctgcgaagca ctctctcact ctacggctcgc gggccagggcgc cctttgata ggcacatgct ctctgctcca tgcactcgggc gggccagccccc agctacacta ttctcagcgt ggtgtctctc atcgtcattc cacttgattt catgattggc tgcactocg tgggtgtctc tgcagcccgg agggcagctatg ctctgtctga caatgccaag agaacacatgt tggtaagtgctc agtcaaggtgac tgrtgggtatga algggtatga agtaaggatga gtaagatga agtatgttcca ggtatttccgc gcaacgcatga aggtgtgaggtc aaaggcccaag agggcccaag gtaagcccaag gtaagcccaag gtaagcccaag acgggggacca gttgtaagtag tgrtaagggcc agggccagc aggtatgtcag agtaagagcagc acgggtgcca gcaagaggtgag aatggtaagga gcaaccaagt tgaaggatgaac agtcaagggc tgcacagag gtaaccaagt gcaagcatga ctgggtgtgaa gtaigacagg agttttgtgtga agtgcacatc aatttcagtg aggtatgagcti cgaaggcagtg aaatcccgc agagccctcc acccagtgcti cgttaacagca acagcaacc tctctggccc aggtgtcacc agtgcacaagc tgcataagtg altcttcaica tcatcttct clatgtcta tcccggggc cctactgtct tttagcagtc ctggccgtgt ggggtggatgt cgaacaaccag gtaaccatg ggtgtgacac calaalcac tggctttct tctgcagcgc ctgcatacc cctatgacti atgggtatga gcaacaagtaac attaacagga catgtcgaag agattctctt gcaaggtaaaa gcccocgaaa gaaagatagcc acccagactt gcccggaaac aggggtggga ctgaaggcaaa gattgtccct tctacgatt ctgctacti tctctga	Homo sapiens

583	190414	G Protein-coupled Receptor GPR101	CAC33098.1	MTSTCTNSTR ESNSSHTCMP LSKMPLSLAH GIIRSTVLVI FLAASFVGNL VLALVLQRKP P QLLQVTRRFI FNLLVTDLQ ISLVAPWVVA TSVPLFWPLN SHFCTALVSL THLFAFASVN TIVLVSVDYR LSIHPLSY SKMTQRRGYL LL YGTWIVAI LQSTPLLYGW QQAADFERNALCSMIWGASP SYTILSVVSF IVIPLIVMIA CYSVVFCAAR RQHALLYNVK RHLSEVRVKD CVENEDEEGA EKKEEFQDES EFRRQHEGEV KAKEGRMEAK DGSLLKAKES TGTSESSVEA RGSEEVRESS TVASDGSMEG KEGSTKVEEN SMKADKGRTE VNQCSIDLGE DGMFEGEDDI NFSEDDVEAV NIPESLPPSR RNSNSNPPLP RCYQCKAAKV IFIIFSYVL SLGPYCFILAV LAVVVDVETQ VPQWVITIII WLFFLQCCIH PYVYGGMHKT IKKEIQDMLK KFFCKEPPK EDSDPDLPGT EGGTEGKIVP SYDSATFP	Homo sapiens
584	190418	Inflammation- Related G Protein-Coupled Receptor EX33	NM_020370	taactgtcca cagaagaaga ctgctcttg ggtgagtgga actcttcca ttatagaagg aaftgaaggc tgaagaact agocctatc A atgtggaaca gctctgacgc caactctcc tcttaccalg agctctgctt gggcctatcgt taigtgacg taagtctggg gggtgggtg gctgtgacag gcacgggtgg caalgctc accctactgg ccttggccat ccagcccaag ctccgtacc gattcaacct gctcatagcc aaactcacac tggctgact cctctactgc acgctctct agocctctc tgttgacac tacttccac tgcactggcg caccgtggcc accctctgca gggatttgg gctctcctt ttgtctcca attctgtc catcttgacc ctctgctca tggcacagg accctacctc ctatggccc accctaaagt ttccccaa gtttcaagg ccaaggaggat agtctggca ctgggtgagca cctgggtgtt ggggtggcc agcttggctc cctctggcc tattatc ctggctacg taigtgtcac ctgcagctt gaccctacc gaggcggcg ttaccacc atctctatgg gcatctact tgtgtctggg ctacagtg tggcatct ctatggctc atccaccggc aggtcaaacg agcagacag gcatctggacc aatacaagt ggcacacagca agcatccat ccaacalgt ggccaggact gattgagcca tgcctgtctg ttccagagag ctggacacgca ggttagcalt agtgaagaccc agtgaaggga tttctctga gcacgtcagt gctggacca cccagacct ggaaggggac tcatcagag tgggagacca gttcaacagc aagaagacta agcagatggc agagaagaag cctccagag catctgccaa agccacgca ataaaggag ccagaaagagc tcgggattc tcatgggaat tggggaagt gactcaatg tgttgcctg tgtctctg ctgtccctg agctacatcc cctctgtc gctcaactt ctggatggca ggtccagggc tcccgggtg gttccatgc ttgcggcaa cctcaccgg ctcaatgggt gcatcaacc tgtgtctat gcagccatg accgcaat cggcaagca taigtctca tttaaaag agggcccg agttccata ggtccaltta gactgtgac cctatgcacc agaatcagg actgtctc ctaggacca agtggccagg taalaggaga atagggtgaaa taacacatgt gggcatttc acaacatct cttccagcc tcccaatca agtcttcca tcatgtatc aatgttcag ccttagatg cccaaggagt attaaat attaaat gaaatctgt ctttaaaa aaaaaata aaaaaa aaaaa	Homo sapiens
585	190418	Inflammation- Related G Protein-Coupled Receptor EX33	NP_065103.1	MWNSSDANFS CYHESVLGYR YVAVSWGVV AVTGTGVNVL TLLALAIQPK P LRTFRNLLIA NLTLADLLYC TLLQPFSDVT YLHLHWRTGA TFCRVFGLLL FASNSVILT LCLIALGRYL LIAHPKLPQ VFSAKGIVLA LVSTWVVGVA SFAPLWPIYI LVPVCTCSF DRIRGRPYT ILMGIYFVLG LSSVGIFYCL IHRQVKRAAQ ALDQYKLRQA SIHSHVART DEAMPGRFOE LDSRLASGGP SEGISEPVS AATTQTLEG SSEVGDQNS KRAQMAKS PPEASAKAQ IKGARRAPDS SSEFGKVTM CFVFLCFAL SYPFLLLNI LDARVQAPRV VHMLAANLTW LNGCINPVLY AAMNRQFQA YGSILKRGP SFHRLH	Homo sapiens
586	190419	G Protein- Coupled Receptor Ls190419	AJ303165	cttggctta gactaaac agttttct cttccacag caataact gacagtatc atctctcc agctgtggc aagaagacag A aagctctct acaatct ctggcact gctgtccg acatctgt cctttttc atagtgtt tggactctt gttggaagt ttacttcta acatgcat gctcaggtc ccgacaaga ctagagaat gctggaatc tcatcatc accatccat atggattact	Homo sapiens

587	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	LCFRKPVFL LSTANILTVI ILSQLVARRQ KSSYNVLLAL AAADILVLFF IVFVDFLLED FILNMQMPQV PDKIEVLEF SSHTSIWIT VPLTIDRYIA VCHPLKYHTV SYPARTKRVV VSVYTICFLT SPYVWPNP WTEDYSTSV HHVLWIHCF TVYLVPSCIF FILNSIIVYK LRRKSNFRLR GYSTGKTTA LFTTTSIFAT LWAPRIIMIL YHLYGAPIQN RWLVHIMSDI ANMLALLNTA INFLYCFIS KRFRIT	P	Homo sapiens
588	190427	CysteinyI Leukotriene CYSLT2 Receptor	NM_020377	aaagtictia agtittgaaag gtcagcticta accaaacaaa taaatggctia ttacatcic aaaaatcagg aaattiaaat ttattatgaa atgtaatgca gcatgtatgta aagactiaac cagtgttta aaactcaact ttcaaaagaaa agtatagtati gcttctctgt ttatataaac ctatgagagat gtaatacagta agcaagaaagg aaaaaggggaa atccaaaag taacttttg 'tgc'tgtttc ttntaaoccc agcatgggaa gaaaattat gtctgtgcaa caatccatct ccgtatcaga aalgagaacca aatggcaact tcaagcaata caacagcagg aactggcaca ttgaaaact caagagagaa ttutcccaa ttgtatalt gtaataatt ttctggggag ttctgggggaaa tgggtttgtcc alatalgttt tctgtgagcc ttataagaa tccatctg tgaacgtttt cagtctaaat ctgggccaatt cagatctctt gttcalaagc acgtcttctc tcaagggtcga ctataltt agaggtctoca attggatatt tgggaagocgg gcttgcaaggaa ttatgtctta ttctgttat gttcaaatgt acagcagtat ttattcttg accgtgtcga gttgtgtggcg ttccgtggca atgggtcacc ccttcggctc tctgcaagtc accagcaica ggagtgcccg gtaactctgt gggtatcalat ggaacttat cagctcttcc tcaataalgc tctgtggacag tggctctgag cagaacggca gttgtcatic atgcttatgag ctgaactct ataaatggc taaagctggcag accatgaact atattgocct gggtgtggcg gttcttaca ggaaagggcaact gaccaccatc atcatcaact tgaatcact ctctgtgt ttctgtccct atcacact gggtgtggcg caatgtccg caatttcc atctcagcacc tttatctgc tgaatctgc ttgtatctgt ttctgtgt ttctgtccct atcacact gaaagagocgtc caatgtacga cagtggaagt gggtttatgc aaagacagagc tttgtttatc acactggocct tggcagcagc caatgtccg ttcaatctc tgcctatla ctgtgtggcg gaaagaaatla agggacagact aaagtctgca ctcaagaaaag gccaatcaca gaaagggcaag acaaagtgtg ttctccgt ttgtgtgtggcg ttgaaagaggg aaacaaaggt ataaagggct ctatgagag agctgttt gtaactctt gttcaatctc atcatct agttccaaa tgaacttgta ttatcacc ttccaaacaaa tttgtatct taaatitag ttgaccata ctitttgtaa taaagacciac ttcaaaaatt ttatcagtg ttatttcat ttgtgagct taaatgagggaa tacaagagaa aaaaatccia ctatgagctt gggtggctgaa atatcagact gggtgaaaaat gcaagggcaca ttggatocia ctitttca gtaattgaa cagatctctg gccaatggc ctittaaat tcttcaaaag agccaact tcccaagct ctocagctcc cctgtctct tcaatcccti gaaatataagc aactaaagac gctacttgaa gccccagggc agaaaaagaaag caatcttaa gttatcagggaa aagactaact gttgaaagggaa aggtctgtct ataaacaaagc agtcaatggt ccaaggtaaag gaaatgtgaa aggttttaac acatgaaagg agaaaggttt gaaagcaaaa gaaactggcaa taaatgagggcg aaggtgaaat ttatttggc atttggagaa aggttttaac acatgaaagg caaocctatt tcaatgttt ctctgtcc aggtgtttatag gaaagggcaggg aaaaagttagaa ggaggtatctg ctaggaaalg aaaaatgttt gtaatagaaalg gaaaggggggaa catcaagggac atgtatca aatttttt gaaagtcagg ttatgttacc ttgtctgcaag ttctctcc attaatcat tgggtatggaa gccaataa aaaaagggcg ctctgagggat taagggttgaag caatcaagggg aaaaatggag taaaggggcaa atagc-aaaag ttgtgtcat ccttgaaatc tatataat tccagcagaa agttatgaggg agatgtctggc ttccctttg agtatagtt gaaataacact agtatagttg aggtgttctt ttgtgtcat ttgaaacaaagg ctataggtatc taocaaactac ttacaaactac tatcaccag accattgtac ttgaaacaaat ttgaaagcagtt	A	Homo sapiens

Homo sapiens

P

NP_065110.1

Cysteinyl
Leukotriene
CYSLT2
Receptor

190427

589

ctccctgacg ggcagattat gccaggcact ttacattgt tgaatccat accaaagtc accaaagtc tgaattccat ttacagctg
aagaaattga agcttagaga aattaaaga cttgtttaag ttacacagc tagaagaagc ttataaatc tctgtgcaga agtgttgct
gggtgctac ccacacacta ccttgtaaa cttccagaa gattgtga aagcttgat aagagctgic ctltccacc aatttccct
cctctcac tctacaga aaacaaaag ttctctca gattgtga ctaatgac agtaagggtt ggaaggatga tggcattctg
aagataggga gggactaagt cagtgtcat actaac
MERKFMSLQP SISVSEMEPN GTFNNNSRN CTIENFKREF FPVYLIFF WGVVLGNGLSI
YVFLQPYKKS TSVNVFMLNL AISDLLFIST LPRADYYLR GSNWIFGDLA
CRIMSYSLYV NMYSSYFLT VLSVRFAM VHPRLHVT SIRSAWILCG IWLIMASS
IMLLDSGEQ NGSVTSLEL NLYKIQLQT MNYIALVGC LLPFTLSIC YLLIIRVLLK
VEVPESGLRV SHRKALTTI ITLIIFLCF LPYHTLTVH LTTWKVGLCK DRLHKALVIT
LALAAANACF NPLLYFAGE NFKDRUKSAL RKGHPOKAKT KCVFVSVMWL RKETRV

Homo sapiens

A

NM_018485

G Protein-
Coupled Receptor
C5L2

190437

590

ctgtgtgccc agtgtctgga caaatctaa cttccaaag actocaaa ccaagagacac caggagctgt aatgggggac
gattctgta gctacagaga tggggattac agcgacctt cggacogccc tggtagatgc ctgtagtgcc cttgtctggc
catcgacccc ctgtgcgtgg cccgcctccc actgtatgcc gccatcttc tgggtgggggt gccgggggcaat gccatgggtg
cttgggtggc tggggaagggt gccgcggga ggggtgggtgc cactgtgttg cttccactgg cc-gtggc-gga ttgtctggc
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ctgtctaccc tggctctgc cactacccc cgggtgtcac agggagcacti cccagccccc ctgcagtggt tgggtggacta
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tcaigtacti gctatgtgca aggtctttt aggcataga gatatagcag tgaacaaac agaacaaat cttgccc
MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAAFLVGV
PGNAMVAWVA GKVARRRUGA TWLLHLAVAD LLLCLSLPL AVPIARGHW
PYGAVGCRAL PSILLTMYA SVLLLAALSA DLFCLALGPA WWSTVQRACG
VQVACGAAWT LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSTENAV
TAIRFLGFL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH
LLGLVLTAA PNSALLARAL RAELPLVGLA LAHSLNPMML FLYFGRAQLR
RSLPAACHWA LRESQGQDES VDSKKSTSHD LVSEMEV

Homo sapiens

P

NP_060955.1

G Protein-
Coupled Receptor
C5L2

190437

591

Homo sapiens

A

LG94114

G Protein-
Coupled Receptor
Ls190438

190438

592

atgtgtgggc ctgtgtgtct ggggtccagc ctgtgggtc tctgtaccc tgggacgggg gccocattgt gctgtaca
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596	190595	G Protein- Coupled Receptor SH120	NM_016334	A	Homo sapiens
<p>agcaccctggg aaaaaggcaga ccgtgtgtgagg gggcccttggg cccacggcgtg ctgtggccct ggggtgtggg aagtggtgagg agggagcttc cttaacctic ggcattggtt tctgtgacga ctacgacac atgtatattact cccaatattt attttttgga ttgggttggc ttttttcat ggccaatg tttaagact agtgaatagc tgaatagt gtacaggttga tcttccgt gacgtttgca ttcttggca ccatgttga gctcaatc ttgaatct tagtgaatag tccagttat ttacttggaa aatgaacctg tgcgttaac tgcgtgacct ggttttcatg gttgctttt acalltggcta ttatltgg agcaatacc gactactgca taacaacga ctgctttt ccgtgtctt atggctgacc ttatgtat tctcttggaa actaggtgagt ccccttccca ttccagcc aaaaatggg atctatcca tagaagacct catcagccgg gttgtgttga ttgtgtgtac tctatggct ctcttttg gatttgggtg tctcaactg cccatacct acatgtctta ctcttcagg aatgtgtactg acacagatlat tctagccctg gaaagggcagc tgcctgcaaac catgtgatatg atcalaagca aaaaagaag gtagtgcatag gcaaggtgga caatgttcca gaaaggtgggaa gtgcataaca aacatcagg ttcttgggga atgaataaa gttttacc acagatca gtagtgaataa atctatctt tatcaacag gaaaggtgag ctgtgtgaata attaagcagg cagtttttc tggtaaacg tgaatlatat gctaacagg agtgaataaga atacttccaa aocctcaagg ggaaatatt taattttt ggttacttt tcttattta ctgtgtttg aaaaatttca tggctaacat caaatagt ttgtalogag ttgggaanaa ggaatctgtc acaagaggca ttgaatcac tgtgaatat ctggggaatc aattgtat gaaagtttttgg tcccaacaa ttttttcat tctgttggga ataatcaltg tcaatccat cagaaggtatg ctgtatcact ttaccaagt cttaatggc atctciagca gtaaagtctc caatgtcat gttctgtat tagcacaag aalgggcaag tactttgtct cctctgtgtct gctgtatccga atgtatagc cttagaata cc-gcaacata atcaatcag tcttggga acttgcagtc aacttctac accgttgggt tgaatgtat ttcttggca ggctctctc tagcalac ttocctatt tggctacaa acagtgacaa gaaaggtcaca tggcactttg aactaaagcc tactacagac tgttagaggc cagtgtgttc aaaaattaga tataaggtggg ggggaagatg gaaacaggggc ctgacattt ataacaac aaaaatgtat ggtagcatt ttacacttca tagcalact ctcccttc aggtgtatct atgaacatga gtatgacag ccagaacatg agtgggaaga ctactcaag acatactca gcaagaga ca tccgtgttgg atatagggct ggtgtgaagg cgtgaaggga ccaagaact aaggtgtgaa aatacactg aacttgggg caagacatg ctatgtgtagc tgaagcacaac acgtagatt tccgttttaa ggtttcagta gaaaggtta tagctttgcc ttgagatga ctcaataaa tcaagactg t MSFLDSSIM ITSQILFFGF GWLFFMRQLF KDYEIRQYVV QVIFSVTAF SCTMFELIIF EILGVLNSS RYFHWKMNLC VILLLVFMY PFYGYFVVS NIRLLHKQRL LFSCLLWLTF MYFWKLGDP FPILSPKHGI LSIEQLISRV GVIGVTLMAL LSGFGAVNCP YTYMSYFLRN VTDTDLALE RLLQTMDMI ISKKRMAMA RRTMFQKGEV HNKPSGFWMG IKSVTTSAG SENLTLQOE VDALEELSRQ LFLETADLYA TKERIEYSKT FKGYFNFLG YFFSYCVWK IFMATINIVF DRVGKTDPTV RGIEITYNYL GIQFDVKFWS QHISFILVGI IIVTSIRGLL ILLTKFYAI SSSKSSNVIV LLLAQIMGMY FVSSVLLIRM SMPLEYRTII TEVLGELQFN FYHRWFDVIF LVSALSSILF LYLAKHQAPE KQMAP</p>					
597	190595	G Protein- Coupled Receptor SH120	NP_057418.1	P	Homo sapiens
<p>aggtcaggg cgggtgttgcg tggatg-cgggg ggc-gcggccg cggcagag agtgtactcg ggcaggaaggc cagctggagg gtcggcgctg cggggccggc ggggtgtgaa gttcgttggca tcaagagaaga agatgtaggc tcaccaagggt ctacacttcc tctgtcttt cgtgtatcac tgggttggct ctgaagaagc cagacatcc cgaaggctgttgg ggtcgtgacct cctccctcag lacgtgtccc tgtgc-gacct gtagcgccalc tgggtgttgg tgggtgtaggc ggtgtgtggc ggggtgtggc tgaacact gtctctgag ctatctctc tgggtgtggct gcccitac aaggtgaaggg agtgaagagg cccgtgtggc ctccacttc tgttccctc ggggaacctg gggcttttg ggtgtgagtt tgccttalc atccaggagg acgtgaatcat ctgtctgtc cgccgcttcc tctgtggggcgt cctcttttgc ctctgtctct cctgtcttct gtagccaggca tggcgcggtg gtagggctgtg gtcgccatggc acggggccccc ggggtgtggca gctgtgtggc ctgtgtgtgt gctgtgtgt ggtgtgtgt atcatgctg tggatgtgtgt ggtgtgtatcc gttgtgtgtg acacaaaggcc agccctgtgc tacaaggtcca tggatgtgtgt gttgtgtgtc</p>					
598	190599	G Protein- Coupled Receptor GPCR5B	NM_016235	A	Homo sapiens

[illegible]

[illegible]

[illegible]

[illegible]

sapiens

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 ALFGISSMIT LTAIALDRYL VTRPLATFG VASKRRAAFV LLGVWLYALA
 WSLPFFGWS AYVPEGLITS CSWDYMSFTP AVRAYTMLLC CFVFLPLLI IYCYIFIR
 AIRETRALQ TFGACKNGE SLWQRQLQS ECKMAKIMLL VILLFVLSWA
 PYSAVALVAF AGYAHVLTPT MSSVPAVIAK ASAHNPYIY AIHPKYRVA
 IAQHLPCLV LLGVSRHSR PYPYSRSTR SILTSHTSNL SWISRRQOE
 SLGSESEVGW THMEAAVWG AAQANGRL YGQGLEDEA KAPPRQOGE
 AETPGKTKGL IPSQDPRM

Homo sapiens

algatlaacag gcccgacca gttacttic tccggcaac aciggttcg cttctggg tactctica cttctggg ggggctccc
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 MDTPDQSYF SGNHWFVSF YLLTFLVGLP LNLALVVFV GKLRQRPVAV P
 DVLLNLTLAS DILLLLLPF RMVEAANGMH WPLPFLCPL SGFTTITY
 LTALFLAAS IERFLVAHP LWYKTRPLG QAGLVSVACW LLASAHCSVV
 YVIEFGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVPLIIT
 SYCYSRLVWI LGRGGSHRQ RRVAGLLAAT LNLFLVCFGP YNVSHVVGVI
 CGESPAWRY VTLSTLNSC VDPFVYFSS SGFQADFHEL LRLCGLWGQ
 WQCESSMELK EQKGEEQRA DRPAERKTSE HSQGCCTGGQ VACAES
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 ggcacaagc atggatcag ccatccag catcagaag atgcactct ttacagctg cttcaacca atctttatg

Homo sapiens

P

Homo sapiens

A

604 190627 G Protein-Coupled Receptor GPR41 & GPR42 NM_005304

605 190627 G Protein-Coupled Receptor GPR41 & GPR42 NP_005295.1

606 190701 C-C Chemokine Receptor 11 NM_016557

609	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	<p>gggagcgg accgctctia ciaccacat ggcgctcggg tctacagcgg gggcgctctac gacctgctgc ccagcagctc tgcctactga cgcagggctc aggccagggg cgcgcgctgc gggcagggg gctctcccg ggcgggaaag aggtgaaagg atgaaagg gctggggg</p> <p>MQMADAATIA TMNKAAGGDK LAELFSLVPD LLEAANTSGN ASLQLPDLWW ELGLELPDGA PGHPGSGG AESADTEARV RILISVYVWV VCALGLAGNL LVLVLMKSMQ GWRKSSINLF VTNLALTDQ FVLTLFWAV ENALDFKWPFF GKAMCKIVSM VTSMNMYASV FFLTAMSVTR YHSVASALKS HRTRGHGRGD COGRSLGDS CFSAKALCVW IWALAALSL PSAFSTTVK VMGEELCLVR FPDKLLGRDR QFWLGLYHSQ KVLGFLVPL GIILCYLLL VRFADRRRA GTKGGAAVAG GRPTGASARR LSKVTKSVTI VVLSFFLCWL PQALTTWSI LIKFNAVPFS QEYFLOQVYA FVSVCLAHNSCLNPVLYC LVRREFRKAL KSLLRJASP SITSMRPFTA TTKPEHEDQG LQAPAPPHAA AEPDLLYYPP GVVVYSGGRY DLLPSSAY</p>	P	Homo sapiens
610	190711	G Protein-Coupled Receptor GPR85 (SREB2)	NM_018970	<p>ggcagcggga ttatctgct gctcaagat cagattata cgtgagaaga gatttttatt ttgtttca ttacagatt attataagc aaaaagcatg cagaaaaaga agcagacggt ttacattggg aataatga agcgctgctg ctggtttgg gtaggagaac tgggaagttg ttgcttaaaa ttatataca cctccacaaa caaaacttt cggaaatggg aaaaataaga aatgcatgat tctagaaggca ttctaaagca ccacgctgc agcgtttgg gctcgggg taatccoga ccgtttgggac tggtaagggc ttactgaagg cttcattct ggaaagcctt acaagactga ggaataatcag actgcgaac accgggaacg gttcctttgc agcacagaag caatctcti cccalcctc gcatattctg atggcaaac aagtggaaga aagaagggaag catgactgca gatcatga gttctttg tggattat ttacgataa atgtatgata ctactttc ctgtttta tatagaic atgtagactg actgaaggctg taactatc cttccatcat ctatggcga ctatggcat gcaactga acattttga aaatctctg ccttaacag cttttcga actgactcc ttgggtttca taataggagt cagcgggggg ggcaacctcc tgaatccat ttgcttagtg aagaataaga ctttgcatag agcaccttac tacttctgt tggactttg ctgtcagat atccatgat ctgcaattg ttccattt gttttact ctgtcaaaa tggctctacc tggacttaag ggactctgac ttgcaaaagg atgcttic tgggggggtt gtctgttic cacactgcti tcatgctcti ctgcatcgt gttacagat actagctat cgcctatcac cgtcttata caaaaggct gactttgg acgtgtctgg cgtgtgctg taiggtggg actgtgtg tggccatggc attccccc gttttagcg tgggcaacta ctactatt aggggaaggag atcaatgac ctccaacac cgtctctca gggttaatga ttcttagga ttatgctgc ttctgcti catctctta ggccacagc ttgttaact caagctgata ttctgtcc acgactgaa aaaaatgaa cagttccagt ttgtagcagc agttcagccag aactggacti ttcatggctc tggagccagt ggccagggcag ctgccaatg gctagcagga ttgggaaggg gttccacacc accaccttg ctgggcatca ggcaaatgc aaacacaca ggcaagaaga ggctattgg cttagagcag ttcaaatgg agtaaaagat cagccaagaa ttctataa tgaatttct gttttacc ttgtggggcc ctaactggt ggctgtgtat tgggaaggtt ttgcaagagg gctgttagta ccaaggggat tttaacagc tgcgtctgg atgagtttg cccaagcag atcaatcti ttgtctgca ttctcaaa cagggggctg agcgctgti tcaagcaac cctctttac tgcagaaat ccaaggtaac aaagggaact tactgtgt taigaggagg catctgtaaa tcttagct tttgaaact aactctct gcttagcuaat tggggccat agccatttt tgaagaaga ttcaagatg gaatcagcag tttaaggat ttggcaaca ttgcaagtc ttgcaatag ttacattata atccatttt aaatctcaga gttatcttgc tgaactgagc aggtgtcag latcagcti aatgctc taltgacta catatgaaaa aacatcaaaa aacattagc atgggacalc ttaataat aagtgtgact gaggtaatg tgttgaata aactattt agaaagtuga agactttaaa acatttala ctacttgt ttgcaaga ctaaaatt tgggggacta aagttactga atccataa gacgtgcaa tgaatttg gaataacaa ctttaaac cgcctgttaa gttctggggg gcatccaaa gcaattat agaaattact tttttgt taalatcatg ctattttca</p>	A	Homo sapiens

611	190711	G Protein-Coupled Receptor GPR85 (SREB2)	NP_061843.1	<p>alacacattt cctcattac tagtaagatt gctagcatig aactigiatla tgggtttt gttgattgg tataaagttt tuccaatca titaatttt acaaaagctc gataatggc tggagagcaa catiaatgg accagocgt cacactagag cagttictaat aatgcagaat aaatacatgt tgcctaaag ggnatncat tatctcat ctiaatgg actggagcaa atagccaag gaaatacaat cagtaactgg tcatgctcat gctacaaag gtcagtgga gactattat tacttttcc ttittttc acatgggtg aaactaaag tgcatacac tgaataaag agattttct clacgggtg clacoccttc taactgtic taagaagcag gcaagtggag talgtttala tttaagica gctgtcaag ggaaccaca gctatgtat gacatocgc acattggg aagcaatit tcaactgaag gcaagcgtt gttatct tctgcacatt cagtgatag gaaatnaa taattcagt ttaactgt gaaagctat attatgatt cgggtattt agaaalacal tagagctgt gaggctcat cttaagata cagatgtgtg aacticaala taagtgctca ttggcaaa ttacocgtg lagocctgta attttctga aataagttt acattttgg cacatacaa cgtttttt aattgggag gcaagcacaa actaggaaga ctgcttat taigtgttg cttttgat ctgtagctc clatatoca gacttgaaat gataagaaat taatcaacat aatgcagata aactgacata ataatctg taagaacatt attgtgagt ttatataat catocctcta ttacttaa algccagtag taatagaga tggtagctg cttagtaat tggcagaa tttaataa aacatacac ttiaattgg agcatagac catagaaat tggggttca aataacaac ttgaagaag aatgtttac actaacata tgaacaact agaaaggtt attatttg ttgctttt gttttttt ttatgttg gtttttga agtttttt ttitttga ttgataat aagataaga alcaataac acagaattcc atatgctat agtactcig taagaagaal aicatatata ataaagaaa taatcaag aatgtttca atggttaaa aaaaaaaa aaaa MANYSHAADN LQNLSP LTA FLKLTSLGFI IGVSVVGNLL ISILLVKDKT LHRAPYFLL DLCCSDILRS AICFFVENS VKNGSTWYTG TLTKVIAFL GVLSCFHTAF MLFCISVTRY LAIAHHRFYT KRLTFWTCLA VICMVWTLNV AMAFPPVLDV GTYSFIREED QCTFQHRFR ANDSLGFMLL LALILLATQL VYLKLIFFVH DRKMKPVQF VAAVSQNWTF HGPAGSQAA ANWLAFGRG PTPTLLGIR QNANTTQRRR LLVLDEFKME KRISRMFYIM TFLFLTLWGP YLVACYWRVF ARGPVVPGGF LTAAVWMSFA QAGINPFVCI FSNRELRRCF STLLYCRKS RLPREPYCVI</p>	P	Homo sapiens
612	190725	G Protein-Coupled Receptor GPR26	LG93120	<p>aggttagtgg agctttct cactgtgcc atcggtccc actgggggg gctgtccaaag tgcitggcg acagcaaggc cgtatccgac ccttttgt actcttact ggcacacacg taacgcaaaa gctgcaagga gattctgaac aggtctcgc acagagctc catcacacc ttgtgctca caggagactc taacgcaag aacattcgc cgggtctga g MNSWDAGLAG LLVGTMGVSL LSNALVLLCL LHSADIRRQA PALFTLNLTC GNLLCTVNM PLTLAGVVAR ROPAGDRLCR LAFLDTFLA ANSMLSMAAL SIDRWAVVF PLSYRAKMLR DAALMVAYT WLHALTFPA ALALS WLGFH QLYASCTLCS RRPDERLREA VFTGAFAHLS FLFSFVLCC TYLKVARFHC KRIDVITMQT LVLVLDLHPS VRERCLFEQK RRRQRATKKI STFIGTFLVC FAPYVITRLV ELFTVPIGS HWGVL SKCLA YSKAASDPFV YSLLRHQYRK SCKEILNRLL HRRSHSSGL TGDHSQNIL PVSE</p>	A	Homo sapiens
613	190725	G Protein-Coupled Receptor GPR26	LR26	<p>aaggccaaca ctaccgaga gcttagggag gtagggggcg cctgtccc accgtccgca tcaagttag tgaagcttgt actgtggga ctgattagt gcttagact ggcgggtaac gcatcttgt cctgttgt gctcaaggag cgtgocctg acaagctcc ttactact ctgtgtgacc tggocctggc cgaatggcata cgtctgtccc tctgtcttg ctttgtcgt gcttctggc gcacagctc ttatggacc ttacgtgcaa gattgtggcc ttatggccg tgccttgg cttcaltgc gcttcaltgc tgtctgcat caggtcaccc cgtctacatgg ccatcgocca ccacggcttc taaggcaagc gcatgacat ctggacatgc gcggctgca tctgcatggc ctggacocctg tctgtggocca tggocctccc accgtcttt gacgtggggca cctacaggt tattcgggag gtaggacag gcatcttga gcatagctac ttcaaggcca atgacacgct gggtcttcatg ctatgttgg cttgtctcat</p>	P	Homo sapiens
614	190741	Streb3	NM_018969	<p>aaggccaaca ctaccgaga gcttagggag gtagggggcg cctgtccc accgtccgca tcaagttag tgaagcttgt actgtggga ctgattagt gcttagact ggcgggtaac gcatcttgt cctgttgt gctcaaggag cgtgocctg acaagctcc ttactact ctgtgtgacc tggocctggc cgaatggcata cgtctgtccc tctgtcttg ctttgtcgt gcttctggc gcacagctc ttatggacc ttacgtgcaa gattgtggcc ttatggccg tgccttgg cttcaltgc gcttcaltgc tgtctgcat caggtcaccc cgtctacatgg ccatcgocca ccacggcttc taaggcaagc gcatgacat ctggacatgc gcggctgca tctgcatggc ctggacocctg tctgtggocca tggocctccc accgtcttt gacgtggggca cctacaggt tattcgggag gtaggacag gcatcttga gcatagctac ttcaaggcca atgacacgct gggtcttcatg ctatgttgg cttgtctcat</p>	A	Homo sapiens

615	190741	Streb3	NP_061842.1	<p> ggcagctacc catgctgct accggcagagct gctctcttc gggatagtc accgcagagat gaaagccagtg cagatggctg cagccatcag ccaggaactgg acattccatg gtcccggggc caccggccag gctgctggcca actggatgagc cggctttggc cgtggggcca tgcacacac cctgctgggt atccggcaga atggggcatg agccagccgg cggctactagg gcaaggagcga ggccaagggt gaaagcagc tgggcccgat gttacggcgt atcacactgc tcttttgt ccttggtgta cctacacag tggcctgcta ctggcgagtg ttgtgaaag cctggctgt gcccacccgc tacttgggcca ctgctgttg gaaaggcttc gcccaggctg ccgtcaaccc aattgctgc ttctgctca acaaggact caagaaagtc ctgaggactc acgccccctg ctggggcaca ggaaggcc cggctccag agaacctac tggctagt ga MANITGPEE VSGALSPSA SAYVKLVLLG LIMCVSLAGN AILSLVLKE RALHKAPYF LLDLCLADGI RSAVCFPFVL ASVRHGSSWT FSALSCKIVA FMVLCFHA AFMLFCISVT RYMAIAHHRF YAKRMTLWTC AAVICMAWTL SVAMAFPPVF DVGTYKFIRE EDQCIFEHRY FKANDTLGFM LMLAVLMAAT HAVYGKLLF EYHRKMKPV QMVPASQNW TFHGPATGQ AAANWIAFGF RGPMPPTLLG IRQNGHAASR RLLGMDEVKG EKQLGRMFYA ITLLFLL WS PYIVACYWRV FVKACAVPHR YLATAVWMSF AQAAVNPVVC FLNKKDLKKC LRTHAPCWGT GGAPAPREPY CVM </p>	P	Homo sapiens
616	190742	G Protein-Coupled Receptor H7TBA62	E32367	<p> gagctctgic cacagactag agcagggaaag gggggaaagg cggcgaaaga ggttagcagg aatgttaat tatcaggagc aggaacagaa ctgaggagcat gcccaggctc acacaggctc tcaaggcccc agtgttcca gttggggaaga aacaaggagc tggacttcc tctctctt cctccctg tctagctc aaggicactg ctgctgagat gaattccaac ctgtttagt tggcactgtt cctgggcat ggaatagcc tctcagtaac ctctggccac aaacaccca aaactctct tgaataat atcatataa attgctatt cacatgatt ctctcattg atcatggccac tctgtgaag cagacttaac tgaataatt aagcaagaa acaaggcttag gggagaaag taacttccc agtcacacgg ctagtgaaga gcaaggcttg gacttcggcag cctcgtctt tctctctt ggaacacct gctgaatccc tggcttag cacttcca gggccctgg ttggggccc aagggaacac ttgttcaga ggaaggaggg ctggggggctg ccttccatag cgggggttaact ctcccttc ccttccct ctggcaatta gaggccctct ctcttccct ggggttgaagg ctggggggctg aaggagctct agtttggct ctgctatc tgggaacagg aaactccag tacaaggcggc cggcatggcaca taacacctgg caatcaggct gttgctcggc ctggccccc taccaccaat ctgaccaac aggaagggtg tgggtgtgtc ttocacac ccctcccttg aggtgtgggg gttggggaagg gttcacaga gggcccaagg aagcactaa ttacacagcc tcttccatag agctttagt gggctctg cc agtctggcag acatggcag acctcttc tcaagccac caatctga tgcctggga tgcacact caatactt gctctccac caatatt ctggggcaat gcttcggag gcaagtgtgt gaaagtctgat gaaagtccga tggcttccga attccatgccc ctgaaggctca tgggtccct gggctatggg ctgtgggggg caatgggtt gctgggaat ttggggggct tgggtgtact gaaactgt gcccgggaagg cccctggccc acctcagac accttctct tcaacctggc tctgggggaac ctgggaactgg caatcaact cccctttgg gcaaggccgagt cggcacttga ctttacatgg ccttcggag gttgccccttg caagatgtt ctgaaggcca ctgttccaa ctgtatggcc agcatctcc tcatcagag cctgaagcgtt gctcgtact ggggtgtggc calggctgtg gggccaaggca ccaactctc actctctgg gcccgaatag ccaacctggc agttggggc gtcggctggccc tgggaactgt gttctggggg tggaggggtga gttgtgtgt gttggtgtt gctgtgtg ttccccagc aggttactggc tgggggttca ccagctggcag aggtgtgtgt tgggtttat ggtgtcccttg ggtgttata ccaacgcta cctgtgtct tgggtttc tggcggggc gcaacggcgg cggcagggaca gcaagggttgtt ggtcccctct gttccgcatcc tgggtctt ctctcttc tgcctgttc ccaacactgt ggtcactctc tgggtgtgtc tgggtgaagt tgaactgtgt cctgggaaca gtaacttca tactatccag acgtatgt tccctgtcac tactgttg gcaacagca atagctgt caaacctgtg ctgtactgt tctgtggggc ggaaggccccgg caggctctgg caaggcaact cagggtatctg cgggtcgaaggc tgggtcgaaggc tgggtgtcaac aggttggccc </p>	A	Unidenti- ed

[illegible]

Homo sapiens

P

gatgcaggag gaggatata
MYKDCIESTG DYFLLCD AEG PWGIIIESLA ILGIVVTILL LLAFLFLMRK
IQDCSQWNVL PTQLLFLSV LGLFLGAFAL IELNQQTAP VRYFLFGVLF
ALCFSCLLAH ASNLVKLVRG CVSFSWTTL CIAIGCSLLQ IIATFYVTL
IMTRGMMEVN MTPCQLNVDF VLLVYVFLF MALTFVSKA TFCGPCENWK
QHGRLLFITV LFSIIWVWV ISMLLRGNPQ FORQPDWDDP VVCIALVTNA
WVFLLYVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENOELSRAR
DSDGAEEDVA LTSYGTPIQP QTVDPTECF IPQAKLSPQQ DAGGV

Homo sapiens

A

cggcgagggtg gggaaacttc cgaagaggtg ccttgggtac agcaaccttg aagaaagcca ttggccatgg ggaocaaac
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ccttgtct ctctagtc atccccagg ttctccagg gacacagttc agccacagtc agccacagtc aaggttacc aaggttacc
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MGTOPEPGLG ARMAHKALV MCILGLPLFL PGAWAQGHVP PGCSQGLNPL
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TQVFFLLGTL GLFCLVFACV VKPDFSTCAS RRFLFGVLEA ICFSLAAHV
FALNFLARKN HGPRGWVIFT VALLTLVEV IINTEWLIT LVRSGEVGGP
QGNSSAGWAV ASPCAVANMD FVMALYVML LLLGAFGLAW PALCGRYKRW
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WAFVLFYVIP EVSVTKSSP EQSYQGDMPY TRGVGYETIL KEQKGQSMFV
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619 190743 G Protein-Coupled Receptor GPRC5D NP_061124.1

620 190744 G Protein-Coupled Receptor GPRC5C NM_018653

621 190744 G Protein-Coupled Receptor GPRC5C NP_061123.2

Homo sapiens

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622	190745	G Protein-Coupled Receptor LGR7	NM_021634			A	Homo sapiens
				<p>atgacatctg gctctctt ctctacatc ttaatttg gaataatt ttctatggg ggggagacagg atgcataagtg cctcttggc tattctctt ggggagacat cacaaagtcg tctctcagc tccgctcagtg taacggctg gacgactcggg ggaatacggcg cgaagaggagac aacatggggg acaacaatgg atgggtccatg caatttgaca aataatttgc cagtctactac aaaaatgactt cccaatctc tttaggggca gaacaacctg aatgtttggg cgggttctctg ccaatggcaat gctttggcca aggtctggag ctctactcgg atgaacaaca ttacagct gttccatcgg ttcttcaaa tggatcagca atgcacttc agtgggaactt aalaaagaagaa ctctctctg aatggcttcaaa gaattatcat gactctcaga agctgtacct gcaacaacat aagataatcat atgttccatct ctatgcttc agagggactga aatggctttac taactgtat ctacgcala acagaalacat ctctcggag cccgggtgtt ttgaagatct tcaacacta gaattggcaga taatttgaaga taatcacctc agtggaaatt cccaccaacat atttttggg claaattctc ttattctct agtctctggtg aalaaagctc tcaccgggtt acctgtataaa cctctctcgc aacacatggc aagactacat tggctggagc ttgaagggcaa ccaatccat aatttaaggaa atttggactt tattctctg agtaatttaa ctgtttttag gaataaggaa aacaanaaa atcacataa tgaanaaat ttggcacctc tccagaaact ggaatgaatg gaataagat tgaanaactt ccaocgctta taatcaaggaa ccttgaaggag ctgtccaat tgaacttctc claaatcca atccagaanaa ttcaaggaaa ccaattttag taatctctat ttaagaat ttcaacatc agtctactg ggggttggac aaatttcaaa tatccaacaa aggaatgttta gaoctcttat gaactctctt ccaatattt gaagaat ttcaacatc agtctactg ggggttggac cacatgttcg cagctgtataa ccaaacatc agtgaattc atctatagag aactcttgg caagcatat taagaagata ttgtctgggg ttgatctgc agtaacctg ttgggaaca tttttgcatt ttgcagcga cctatataa ggtcttgaaga caagctctgat gccaatgcaaa tcaattctt ctgtctggcg gactcgttaa ttgggaataa ttattctg atcgggagct ttgaactaaa gtttctggga gaatacaata agcatcgcga gcttgggag gaagactc attgtcagct tgaaggaact ttggccattc tgcacaga agtaacatg ttactgttaa catcttgcg attgggaanaa taacttcca ttgtctatc tttagatg gtagaacttc gaanaagcag aacaatacga ttcttgaat tcaattggat taatgttt atagtgctt tcaatcatt gaagcaalaa gaatttca aaaaacta ttggacacat ggaatgtatg tcccttca ttcaagat acagaagaa ttgggoccaa gaattatca ggggcaatt ttcttggat taattggcc gcaattatca tcaatgttt ttctatga agcatgtt atagtgctca tcaagtgcc ataacagcaa ctgaataacg gaatacagtt azaaagaaga tgaatcttgc caacgttt ttcttatag tattatcga tgcattagc ttgatalacca ttttttagt gaataattct tcaatgcttc aggtagaacat accaggtacc ataacctctt ggggttagtatt ttattctg cccatacga ggtcttga ccaattatc ccaatttc taacttga ccaacaagc atttaagaa atgattatc aggtttggga taactacaga caagaanaa ctatggagcag caaaggctcag aaaaacatag ctcaatcatt caatggggg gaattgtggc cacttgcaga gaagccaact gaattaaaga agccgggaact ttacatc cctgtgaaa tgcactgat ttcaatca acgaactca attocattc atga</p>	P	Homo sapiens	
623	190745	G Protein-Coupled Receptor LGR7	NP_067647.1	<p>MTSGSVFFYI LFGKYFSHG GGQDVKCSLG YFPCGNITKC LPQLLHCNGV DDCGNQADED NCGDNNGWSM QFDKYFASY YKMTSQYPFEA ETPECLVGSV PVQCLCOGLE LDCDETNLRA VPSVSSNVTA MSLQWNILRK LPDPCFKNYH DLQKL YLQNN KITSISYAF RGLNSLTKLY LSHNRITFLK PGVFEDLHRL EWLIEDNHL SRISPTFYG LNSLLJ VLM NNVLTRL PDK PLQCHMPRLH WLDEGNHH NLRNLTFISC SNLJTVLMRK NKNHNLNENT FAPLQKLDEL DLGSNKIENL PPLIFKDLKE LSQNLNSYNP IQKIQAQNFQ YLVKLSLSL EGIEISNIQQ RMFRPLMNLS HIYFKKFQYC GYAPHVRSCK PNTDGISSLE NLLASIQRV FVWVVSATC FGNIFVICMR PYRSENKLY AMSIUSLCCA DCLMGYLFV IGGFDLKFGR EYNKHAQL WM ESTHCQLVGS LAILSTEVSV LLLTFLTLEK YICIVYPPRC VRPGKCRITL VLLIWTGF IVAFIPLSNK EFFKNYYGTN GVCFFMLAKRF TESIGAQIYS VAIFLGINLA AFIIUVFSYG SMFYSVHQSA ITATERNQY KKEMLAKRF FFIVTFDALC WPIFVVKFL SLQVEIPGT ITSWVVFIL PINSALNPIL YLITTRPFKE MIHRFWNYR QRKSMDSKGQ KTYAPSFITWV EMWPLQEMPP ELMKPDLFTY PCMSLSISQS TRUNSYS</p>			

624	190748	GPCR Ls190748	AX147756	A	Homo sapiens	<p>gctcgtggtt ggggggagct ggggagaggg tcaattgctt ggaagcaagg gctctatccc ctagctctct gctgtagtag ttggggctcc agaggtgggg gggagagagg acttgaaac ttcttgccc ttaccgtctt agccatcaaa ctctgagctg ggaatagtag cgaatgtgaca ggaactttcc ctggggctct ctggggccaca attctctggcc ggaagagaaaga ggaagagaga ggttagagcacc ttcttcactc ctgggggccc atgtgtagaga tgcaggtcgc cctctcttgc ccaataggca tagatagtag ggttagagcag ggggttggcc accgcccagaca ggcacaggtga cctgttccagc actaggttaga ggttagacac ctgggcaagg accctacaaa tggccagtat aaggttaggggg gtcacaggtata gaggcaaggct cccaaagaga acagacacag tacgtagagag tttagagtcg ctgggggagctc gttggggagtcg ataacctcca gcatggctc ctgcatgttc catcttcca atctctggc tgttcatagga ggcacatctg agcatgtcc agtaagagaa gacaaaagag agcatggctg ggaagagagg accgcaaggag agggctcagca cgaatgttag gtaaaataa gcaaaagagc tgcactggcc ttgttaggca gcttgaggga acatggggat tcttcaagta gtcggaagggcc tgccttagtg caaggttaact gtcacaggtg atcaggtcag cctgttagagac agtaggtagct tcttcaagta gtcggaagggcc cttccggcag ctggcagaggg tcttctgt ggggctgtaga gggctgtaga gctgtgtgt acacatcat gaggtaggcca gtagtaggcca caccatcaa ggtgtcagcc acagccagat tcaaggttaga gtagagactg acacatcat tctgttgat caacagcagc acagccacag ccataggtt gtagtagca atgtagaggg agggccagggac agcagagagc actccaaag agaaagtag ttccatgct cgaagtgga ggaactcaat taccaaggca tg</p> <p>MESFSFGVI LAVLASLIA TNILVAVAVL LLIHKNDGVS LCFTLNLAVA DTLIGVAISG LLTDQLSSPS RPTQKTLCSL RMAFTSSAA ASVL TVMLIT FDRYLAUKQP FRYLKIMSGF VAGACIAGLW LVSYLIGFLP LGIPMFQOTA YKQCSFFAV FHPHFVLTLS CVGFFPAMLL FVFFYCDMLK IASMSQQIR KMEHAGAMAG GYRSPRTPSD FKALRTSVL IGSFALS WTP FLITGIVQVA CQECHLYLVL ERYLVLLGVG NSLLNPLIYA YWQKEVRLQL YHMALGVKKV LTSFLFLSA RNCGPENPRE SSCHIVTISS SEFDG</p> <p>atggccaaact ccacagggct gaaagcctca gaaagtcgag gctcgtgggg gttgatactg gcaagctgtcg tggaggttggg ggcactgtcg gggcaacggcg cgtctgttgg cgttgggtctg cgcacggcgg gactggcga cgcctctac ctggcgcaac tgggtgtcgt ggaactgtcg gggcccgcc ccatcagcc gctggggctcg ctggccgcac cggccggccgg gcttggggccg gtcggccagg gcccggccc algccggcc gctcgtcttc tctcggccgg tctgtggccg gcttgcacagc tgggggttggc cgcacttggc ctgggcagct accgctcat cgttgcacccg ctggggccag gctcggccgg gcccggcttgg ctctgtct cccgggttgg ggaactgtcg ggcggctctc cctgtcggcc ccggccggcc cgcacggccccc tgcctctgt cgtctgtcgg tcttggctgg ggggctcggg ccttccggc cgtcttgggg ccttggctgg ttgggtctgc cggccctct gctgtcggc gcttccgggg gcatctgt ggttggcgt cggcgttggcc ttggagcccc acggccgggg cggcggtccc gactccgct ggaactcttg gtagccggc ttccatct ggcccgctc ggccctcgcc tggccgggg caagggcggc ctggggccag cgtctggcgt gggccaattt gcaagcctgt ggcagcctta tggcttgg tgccttggcc cggctcaacc cttctgtac ggggttgc agcggccgt ggccttggca ctggggccgc tctctggcc tgcactgtct ggaactgtt ggggcttgcac tccgcaagcc tggcaccggc gggcactctt gcaatggctc cagagacccc cagagggccc tgcgtagagg ccttcttagg ctccagaaac gacccggg ttggcagtag gggggagccc cgcatacag ggggacactg agagtctt cctcga</p> <p>MANSTGLNAS EVAGSLGLL AAVVEVGALL NGGALLVVVL RTPGLRDALY LAHLCVVDLL AAASIMPLGL LAAPPGLGR VRLGPAPORA ARFLSAALLP ACTLGVAALG LARYRLIVHP LRPGSRPPV LVLTAVWAAA GLLGALLLG PPPAPPAPA RCSVLAGGLG PFRPLWALLA FALPALLLLG AYGGIFVWAR</p>
625	190748	GPCR Ls190748	CAC39548.1	P	Homo sapiens	
626	190749	G Protein-Coupled Receptor GPR62	AF317653	A	Homo sapiens	
627	190749	G Protein-Coupled Receptor GPR62	AAK12638.1	P	Homo sapiens	

628	190774	Histamine H4 Receptor	NM_021624	LAGRSPAYQ GPPESSLS	<p> RAALRPPRPA RGSRLRSDSL DSRLSILPPL RPRLPGGKAA LAPALAVGQF AACWLPYGA CLAPAARAAE AEAAVTWAY SAFAAHFPLY GLLRPVRLA LGRLSRRALP GPVRACTPQA WHPRALLQCL QRPPEGPAVG PSEAPEQITE LAGRSPAYQ GPPESSLS ggaagactac acattitagg taigigaita gaaacacatc tfigicagaat tfigicggctg gaitaattg ctaattigac ctctctac attigalgig algccagata ctatagacat aatcaattia tcatagagca ctogigtiac tttagcatt ttatigctct tagtagctt tgcitaaag ctaggaaag ctfigicact tttagcttt ggigigigaca aaacacttag acatcgaag agtatttt ttctaact ggccactct gactcttgg tggigigigat ctccactct ttgtacatc ctacacagct gttcgaatgg gattttigaa aggaactcig tgaatttgg ctactactg actactgtt agtgcagca tctgtatata acattgctt catcagctat gttcgtalac tgcitctc aaatgctcig tctatagaa ctacacatc tgggggctgg aagattigta ctctgaigtg ggccgttgg ggctcggctc tctatagaa tgggccaaig attcattgt cagaigtctg ggaagatigaa ggtagatgaat gttgaacctcig atttttgg gaaaggtaaa tctgtccat cacatcaltc ttggaattcig tgaatccagt caatctgca tctatattca acatgaaat ttatttggaag ctggigigagag gttgaltcat cagttagggc caaagccatc ctgggactgaag tgcgtctct tccacatct gttggacatc attcagagggg agactatct caaiggagatc tctcttga tgcagagag ggctctgcatc ctctatca ggaagacaga ggaagaaagag tagtctcag ttctctaa gaaacaaagt gaaatagcaat acaatgctt ccaaatggg ttctctcc caatcagatt ctgttagctct tccacaaagg gaaatggtg aacgtcttag agccagagagaa ttgocaaagt cactggccat tctctagggg gtttttgg ttgctggcig tccatattct ctgttcaaa ttgctctt atttatct tgcagcaag gctctaaact agtttggat agaatggc ttggcttca gttgcttca tctttgca atctcttt gtaatcattg tgcacaagc gcttcaaaa ggctttctg aaaaatttt gtaaaaaa gcaacctctia ccatcaaac acagctggc agtatctct taagagacaat ttctacact ctgtaaaatt tagtctcaat ctacatcaa tgaatcaggg ctggctttaa tcttggctt ttcatctac caacagaatc gcaatttga gttcaatggta aattatcca gttgaataaa gcaagtataa algactgat aaattttg taacttga gttcaataag tactataltc tcttagctc tccactctc ctgtcttt agatctaat tcaagctga ttacaaaat ccagtttgg ttctctia tgttccatgc ataatcaggt cttaagtgaa ttcttttt ttatattat ctgaatagaa actatccag ttgaaatc attccataa gttatgcaata gttgaagaagaa cctctggctt gggtactggccc aactgtctc tgaatcgtgg gttggigaggg taggggttga gtttggcaaaa gttcaggggaagc gggtactggccc caggttgaagct cctgtgtgg tccagatttt alattctcaa tccagaataag gaaagaaagc tgggttgggaa gttgaatcagaa gttcagggggtat aggtcagttgtt cacaatgg aggtctctcag ttgaagtatt ttggagggccc tgggttggctac agttgaatcagaa gttcagggggtat aggtcagttgtt cacaatgg tgaagaatg gttgttccca ttctcttgg ttcttttt ctacttcca catcagctc ctttttgag aacataagaa agttgaagagc taaggtgaag tgaagagact gcaatgaata actatagaa cctgggtatc agtatcattgaa ctatgtatag tcaataata ttatttaa aaattttat ttgttggccc gggtactgggtg ctacggctt aaatccagc actttgggtga gttcaggggttgg gttggtatcag aggtcaggggtt atctgaatcca tcttggccaa catgtgtgaaa ccccatctgt actaaatc aaacaaagtgg ctgtgttgg ctggcagctc ctgtatgtccc agttactcgg gtaggtctgaag caggggtgaat gttctgaaccc gggtggggcgg gttttgggg cttggcaaca gttcagact ctgtcaaaa agtaaaaaa atttttgg ttgaatcagagc altgtctct gttcctcaggg ctggagcgtga gtaatgcaat catagctcac tgcagctcgg aactcttgg ctcaagcaat ccttggctt tgggtctcca agtatgtgggg actacaggtia ctggccacca cacttggata attaaaaa ttattctga gtagatgaag ctacgtgtgt tggccagctt gggtgtcaat aatatttt taaaaaaa tttaaaaag gtttttgaag acagatatt gttcgtcac ccaaggttga gttcaggtagc atgtacaggg atcactgcaa cctctgctc ctgggttcaa gttgatttgg tggctaaagc aacttggag cttgggttgg aggttgcagtc caccatggct ggctaatgt gttatttga gtagagatga gttttgcca ttgtgttga ttgtggaatt cctccaaag aagtaaggggt atttccgtgt tggccagact gggtctcaaac tcttggggcig aaacatct cccgtctgg cctccaaag tgcctgggtt atagggcaaa gtaaccacca taatttgc ctgtatgta attatttt taataatgg ttgatttgc ttatgtct taagtcttt ggccaatgt ttacatgt actgtcaga gttatctt tatatgtgg ttatgcaaggg ttatcttgg ctacgtatc </p>	A	Homo sapiens
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acattiait agtttggtta ttttttggc ttttaaaac tttttttg aatggggggg ctgtctctgt tgcctacgca gtagtgacgt
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aaaaaaaaa aaaaaaaa

Homo sapiens

P

MPDNTNSTNL SLSTRVTLAF FMSLVAF AIM LGNALVILAF VVDKNLRHRS
SYFFLNLAIS DFFVGVISIP LYPHITLFEW DFGKEICVFW LTIDYLLCTA SVYNIVLISY
DRYLSVSNV VSYRTQHTGVL KIVTLMVAVW VLAFL VNGPM ILVSESWKDE
GSECEPFFS EYVLAITSF LEFVIPVLV AYFNMYIYWS LWKRDLHLSRC
QSHPLGLTAVS SNICGHSFRG RLSSRRSLSA STEVPASFHS ERQRRKSSLM
FSSRTKMNSN TIASKMGFS QSDSVALHQR EHVELLRARR LAKSLAILG
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Homo sapiens

A

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gataaggtt 1

Homo sapiens

P

METNSSLPTN ISGGTPA VSA GYLFLDIITY LVFAVTFVLG VLGNGLVTVV
AGFRMTHVT TISYLNLA VA DFCFTSLPF FMVRKAMGGH WPFGWFLCKF
VFTIVDINLF GSVFLIALIA LDRVCVLP HP VWTQNHRTVS LAKKVIIGPW
VMALLTLPV IIRVTVPKG TGTVACTENF SPWINDPKER INVAVAMLTV
RGIIRFI GF SAPMSIVAS YGLIAKHK QGLIKSSRPL RVLSFVA AF FLCWSPYQVW
ALIA TVRIRE LLQGMKYKEIG IAVDVITSA LA FNSCLNPML YVFMGQDFRE
RLHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK

Homo sapiens

A

atggaaacca acttctcat tctctgaat gaaactgagg aggtgtccc tgggtctc gggcaacacg ttcttgagat ctctcatg
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629 190774 Histamine H4 Receptor NP_067637.2

630 190823 Formyl Peptide Receptor 1 (FPR1) NM_002029

631 190823 Formyl Peptide Receptor 1 (FPR1) NP_002020.1

632 190824 Formyl Peptide Receptor-like 2 NM_002030

(FPRL2)

Homo sapiens

P

caacagcaatgt ga
METNFSIPLN ETEEVLPEPA GHTVLWIFSL LVHGVTFVFG VLGNGLVIVV
AGFRMTRTVN TICVNLALA DFSFSAILPF RMVSVAMREK WPFASFCLKL
VHVMIDINLF VSVYLITIA LDRICICVLHP AWAQNHRHTMS LAKRVMITGLW
IFTIVLTLPN FIFWTITST NGDTYCINF AFWGDTAVER LNVFITMAKV FLILHFIFG
TVPMISITVC YGIIAAKIHR NHMIKSSRPL RVFAAVVASF FICWFPYELI GILMAVWLKE
MLLNGKYKII LVINPTSSL AFFNSCLNPI LYVFMGRNFQ ERLIRSLPTS LERALTEVPD
SAQTSNTHTT SASPPEETEL QAM

633 190824 Formyl Peptide Receptor-like 2 (FPRL2) NP_002021.2

Homo sapiens

A

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gtcatcaat acatgggggt gaaggtctct ctgtctgtgct tctctctact tttctctgt gtaaaagccat ccaagaacacc

634 190948 EMR2 Hormone Receptor NM_013447

635	190948	EMR2 Hormone Receptor	NP_038475.1	<p>agcaacctcac tgcattcigca gctctgcctc tgcctcttcc tggcccaacct cctctctctc gctggcaatig atcaaacccg acacaaggig cigtgctcca tcatgcccgg taacttgcac tatcttacc tggccacctt cacttggatg ctgctgggag ccctgtacct cttctcaat gcaagggaacc tgaagggtgg caactactca agcalcaaca gattcalgaa gaaagtctag ttccctgggg gctacggaggt cccagctgag acagtggcca ttctgcagc ctccagcct cactttatg gaaacattc cc-gctgctgg cccaacacag aaaaagggaat tatatggggc ttcttggagc cgtctggcgc calctctct gtaattatg ttctttct gggtgacttc tggatttga aaaaacagact ctctccctc aatagtgaaag tttccacctt cgggaacaca aggtatgctgg catttaagc gacagctcag cgtttcatc tgggctgcac gttggtctg ggcattctgc aggtgggctcc ggcggcccgg gtcatggct acccttcac catcatcac agcccgcaagg gttgtctcat ctctgggtg tactggctcc taagccagca ggccggggag caatatggga aatgttccaa agggatcagg aatitgaaaa ctgagtctga gattgacacaa ctctccagca ggctaaaggc tgaacctcc aaaaacagca cgtttaacta gnaaaactt ctgaataaga tcttccctt tggccgggtgg aaaatctgaa caattctga gccatctaga ggggaaagaa agactttgt tctgtgtt tcaagaatt caccatgca gcaatagaa ggatgtatg gaaggcgtgc tggcaatca attctgcag aaacgggaaa tcttccagc cctgcgaat gctatcaaa ctctcagcal atggagggcc agctggggcc catacttgg tcaacttgaa gcaaalatt tatgaagctia tagaagctia agactcttt cacagctct ccttctaca aagactcttc caaatctaa aatgaagcag gaaacacagc ctgaaggagc ttcataccg acaacatctg aagggactag aatgtcaca ccacgactg gatttctaa ttittgtt tttttgt ttttctag ttctacgggt ttgattatt agtcatgta aaaaataga ttactcac atagatcaag agagacacgg ccttgccct catggagctt taaggggaaa atgaagtggt tcttgagct agagtgtgact cagaagccga aattcctaga aatcaggtt ctactgctag gcaatgaaag tataaatat ttataaaca cttctctt tcaatcac</p> <p>MGGRVFLVFL AFCVWLTLPG AETQDSRGCA RWCPOQSSCV NATACRCNPG FSSFSEIIT PMETCDDNE CATLSKVSCG KFSDCWNTGE SYDCVCSPGY EPVSGAKTFK NESENTQDV DECOQNPRLC KSYGTCVNTL GSYTCQCLPG FKLKPDPKL CTDVNECTSG QNPCHSSTHC LNNVGSYQCR CRPGWQPIPG SPNGPNNTVC EDVDECSSGQ HQCDSSVTCF NTVGSYSCRC RFGWKPRHGI PNNQKDTVCE DMTFTSTWTP PGVHSQTLR FFDKVQDLGR DYKPLANNT IQSILQALDE LLEAPGDLET LPRLQHCVA SHLLDGLDVL LRGLSKNLSN GLLNFSYPAG TELSLEVQKQ VDRSVTLRQN QAVMQLDWNQ AQKSGDPGPGS VVGLVSIIPGM GKLLAEAPLV LEPEKQMLLH ETHQGLLQDG SPILLSDVIS AFLSNNDTON LSSPVTFIS HRSVTPRQKV LCVFWEHGQN CGGHWATTGC STIGTRDTST ICRCTHLSF AVLMAHYDVQ EEDPVLTVIT YMGLSVSLLC LLAALTFLL CKAIONSTS LHLQSLCLF LAHLFLVAI DQTGHKVLCS IIAGTLHYLY LATFTWMLE ALYLFETARN LTVVNYSSIN RMKKLMFPV GYGVPATVVA ISAAARPHLY GTPSRCWLQP EKGFITWGLG PVCAIFSNNL VLFLVTLWIL KNRLSLNSE VSTLRNTRML AFKATAQLFI LGCTWCLGIL QVGPAAARVMA YLFTIINSLQ GVTFVLVYCL LSQQVREQYG KWSKGIRKLLK TESEMHTLSS SAKADTSKPS TVN</p>	P	Homo sapiens
636	190955	Leukotriene B4 Receptor BLT1	NM_000752	<p>gccattctt cacaatccgt ggggtagga agcccttctt gaactctgac ttacgttctt gctggggtt ctggccatt ttatatac ctctgacagc tgggagggtca tctctgctt ggtcttctc caagcagaaac aagtgggggc tctggaaagg taaaggacc tcagtggcca ccaatatact ttgcattctt cctgaagaat gaaagtgtga agggagagcag gaaaggcccat ggtagaattg aaggaaaggac tttaattt ttittttt ttittgaat ggaagctcgc tctgtatc aggtctggagt gcaagtggtgc gactcagct cactgagcc tccactctt ggggtacat gattctctg cctcagcctc ccaagttagct gagaclacag gcaacagoca</p>	A	Homo sapiens

637	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	<p>ctaacaccag ctacttttg taatttttagt agagagagcgggg tttaaccatg ttggccagggc tgggtctcaaa ctgctaacat caagtgatct gctctccctca gctctcccaaa gtgtctggagat taaccgtatg aaccaccaca accctggatgg aatttttagt tttagtttt tttagttttg ttcaagtgaaa gtagagcatct cctctgctcag gaaacggggta aggggagaccat ttcttgatag ctggttttcc cttctggcag gggtggggcag agggcatcat gtctctgctc cctctactct gtctctcag ctgagctggc cagctggggc tcaactttgt gttgtctaaag tggaaatgaa tagtagctgt gtagagtagag gtagagtaggta gttgccaatct ccttggcag atcataatc cagactcagc agggtaacca catggggcag cacaaggttag gtgtctgggg aaggggggag taattggcat tctgtgtgat accaagggaga ccatttgat ttggctct accaaagtag atggtagaat gttgtgacta aatggtagca gttcccttaa gtagaggggag gaaaggggggt gctggagagat gggctctctt ccaccacta gatacagct tgaactgaa ctaggggacag aggtctggcc ctcttgatc ttactgat gctctctta aatcagatg ttactaac caaoccaaa ctagggactt gttgagactt gttgagactt tttcttggt cttctaat atctaaac aagggagaa aatcagaa agtatcag atgttagctt ccaatctgag ccaatttcc tttcttggt accatactt cttctctat atgatacat tcaacttt gttcaattt ctagttaga cctggatctt gtagggccac cagctctt cacttccac accctctt cctctctac tggctctctc tcatctggcc ccaotctaa gtaggtctct tggctctgg gttggctgg aatacagact atccccct ctagtgtaggg gtaggggttag ggggtttcag ccaotctca gtaggtctct tcttctgt cctctgctt gttgtactt cttctggct gatttagcaa acagtcacta gtaggtgggg cagggctttg gtaggtgggac agatacaggg atagggctaca ccaotctg ctagacctgg gattggctac agtttccac cagtttctgg caaagctgtt aagttctcc gtagggcag aacatacat cttctgagc accocctca ctaggttag agtttctac tctgtctgt atctctgg tgtcaggtgg gctggctgg gggcttccg gcaacagctt tgggtgggt agtatctga aagggtagca gtaggtctgt gtcactggc gtaggtgg gaaactggcc cggccggac tggctgtat gttcactgt ccttttcc tttacttct gggccagggc aactggagtt ttggactggc tgggtggc ctaggtctat atgtctggc agttagcag taccagagc tctgtctat cagggcag agttctagac gctcactggc ggtggggc cctttgtt ccaagaaagt acggcaccaag gcttagggcc gggggggt gggcaggtc tgggtgtt ctttctgt gggccacacc gttctctgt accggcagat aggtggctgg aatac-gaaca tggactgtt cttctggc taocccaggg aaggggacag gggcttccat ctatctgg aggtctgtac gggtctct cggccctt tggctgtgt gggcaggtac tgggacag gggctggct acagggccgg cgttccggc gcaagccggc cagcggccgg ctaggtgtgt tcatcact gtagcttggc gctctggc tggccctaca cgtgtgtgaa ctggcttaggg cggggcggc gctggccgg cagggccgg gtaggtggct cgtgggggag cgggttaggg cggccggc cgtgtctac gcactggct tcttagcag cagcgtgaa cctgtgtgt acgtgtgt cggccggggc cgtgtgtgt cggcggggc gggcttctg gccaagctgg tggaggggac ggggttccgag gtttccgag cggccggcgg gggcagctt ggccagaggg ctagggaggg cccggcggc ctagggccgg gcttccgag gtaggtctat gcttccag cttctcagtt aatacagact aactagggct gtagggaggg agggcactt cctctggca gtaggttag tcttagcag tttcagct gtagggagtag cagggggcgg gtagggcgg agggcgggg gtaggggggg gtaggggggg gtaggggggg gtagggggag tgggcaag gtagggggc gtagggggc gtagggggc gtagggggc gtagggggc gtagggggc ctagggctg aa</p>	P	Homo sapiens
638	191039	Trace Amine	AF380185	<p>MNTTSSAAPP SLGVEFISLL AILLSSVALA VGLPGNSFVV WSLKRMQKR SVTALMVLNL ALADLAVLLT APFFLHFLAQ GTWSFGLAGC RLCHYVCGVS MYASVLLTA MSLDRSLA VA RPFVSQKLRT KAMARRVLG IWLVSLLAT PVLYRTVTP WKTNMSL CFP RYPSEGHRAF HLIFEAVTGF LLPFLAVVAS YSDIGRIQA RFRFRRTTG RLWVILITF AAFWLPYHVV NLAEAGRALA GQAAGLGLVG KRSLARNVL IALAFSSSV NPVLYACAGG GLRSAGVGF VAKLLEGTGS EASSTRGGS LGQTARSGPA ALEPGPESL TASSPLKLINE LN</p>	A	Homo

[illegible]

641	191132	G Protein- Coupled Receptor 88 (GPR88)	NP_071332.1	<p>gocgaagc attttgagc goccacgat tttaacct ttgtctg tttagagga atccaaag caaacacca gaagacttga gaacttga actggctt taaataacc ggtaatta ttccaca gttgtt gaanaagc ttcaatg tataacct tccattca tgcctta tagaagc ctggagtg calgaacca aggaataac atgaagag gaanaaala tgaagaat atttga gaacagc ttgagtg cttcttac cattagtt ttgtatga cctgggga gtagagcct aggtggcc accagtga gtagcga agaccag cctttac cocttacc ttataga gctttca attgagtg aatctagc agtgaaga aanaatt tagctct tttttga cttatga agaaatgg cgttagtg talagtga atttccag ttgataag atgtcagc cagcactg aatttga acaataag gttatga tttagtgc cgttcat ttttatgc atgcactt gttatcc tatttga accaatt ttgcctag atgtgag cagcttga catctgac tgaatgg gtaaga aagctct ctgttgc ttacatt aanaatc aatgcag atataaa acataaa taccatgc catagc latagc tcttagc tcttagc tagactat ttggcctg gttatcag gttatcag tttagcagg atatttact tcttagc accagaaga atggcctta atattga aggaagaca gtagaccc ttgctat gagttcc tgttgc aatttag aagctcca gttggact tatccaca gttgacac atgcagagc gtaga atgttgc cagcaagc agctgtgc tttagg tttagcag taaactga catatag gaacagtt aatggaga tatccag acataaa tcatatg atagtga gtaggataa taaactga catatag gaacagtt aatggaga ttttcaga catatg gtaggtgc atattct ttgttact aatttact agaatat gaatga atgttga atccatt caataaa ttggaga gaattaa tatatta tatcatg tcatct gttatc catatc catatc ctggccca acagctcag ttaactgc aatcagga caaacagc ttgttct gtagcctg gtagcctg cagagact agagcact gttatc tgaataa ttgagtg gtagcctg gtagcctg gtagcctg gtagcctg agcttact ttatct atccctg ttgagc atctct tcttagc ttatct catattc ttatcaga tatagaat cagaataa aaaaaaaa aaaaaaaa aaaaaa</p> <p>P</p> <p>Homo sapiens</p>
642	191168	P2Y12 Platelet ADP Receptor	NM_022788	<p>MTNSSSTS STTGSLLL CEEESWAGR RIPvSLLYSG LAIGTLANG MVYLVSFR KLQTSNFI VNGCAADLSV CALWMPQEA V LGLPTGSAE PPADWDGAGG SYRLRGGL GLGLTVSLLS HCLVALNRYL LITRAPATYQ ALYQRRHTAG MLALSWAL GLVLLPPWA PRPGAAPRI HYPALLAAAA LLAQATALLH CYLGIVRRVR VSVKRVSVLN FHLHQLPGC AAAAAFPGA QHAPGPGGAA HPAQAQLPP ALHPRRAQRR LSGLSVLLC CVFLLATQPL VWVSLASGFS LPVPWGVHAA SWLLCCALSA LNPLLYTWRN EEFRRSVRSV LPGVGDAAAA AVAATAVPV SQAQLGTRAA GQHW</p> <p>A</p> <p>Homo sapiens</p>

643	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	ataggzaaaa agaacaggat gggtggacc caaatgaaag gactccaatg taacaaat aactaaggaa alatticaat ccttttgt tcaagactcg ttaagcaaa gcgctaaaga aaaaattataa ctagacgaag agcaactaag ttaataataa tgaactiaaa gaacagaag atiaaaaaa caattttat ttaccttcc agtatgaaaa gctatcttaa aatatagaaa actaatctaa actgtagctg tattagcgc aaaaacaag ac	P	Homo sapiens
				MQAVDNLNTSA PGNTSLCTRD YKIQVLFLPL LYTVLFFVGL ITNGLAMRIF FQRSKSNFI FLKNTVISD LLMILTFPFK ILSDAKLGTG PLRFTVCQVT SVIFYFTMYI SISFLGLITI DRYQKTTRPF KTSNPKNLG AKILSVIWA FMFLSLPNM ILTNRQPRDK NVKSCSLKS EFGLVWHEIV NYICQVIFWI NFLIVVCYT LITKELYRSY VRTRGVGKVP RKKVNVKVF IIAVFFICFV PFHFARIPYT LSQTRDVFDC TAENTLFYVK ESTLWLTSLN ACLDPFIYFF LCKSFRNSLI SMLKCPNSAT SLSQDNRKKE QDGGDPNEET PM		
644	191193	Trace Amine Receptor 3 (TA3)	AF380189	atgggaata attctocca agctgaggct ggtagagctgt gttaacaga cgtgaacaga tcttgcatia aaactocctia cagccagggt ccctgactia tcciaacgc cgtcttggt ttggggctg tgcctggcagc gtttggaaa tactgggtca tgaigtctat cttcacttc aaacaactgc acacacttac aaactttctg atgc-gtcgc tggcctgtgc tgaattctg gtagagagica cgtgagcc cttcagcaca gtgagctgc tggagagctg ttggtacttt ggggacaggt actgtaaat ccalacatgt ttgacacat cctctggtt tctctctta ttcaattat gctgtatcic tgttgaaga tacaatgctg ttactgctc tctgactat ccaaccaagt ttactgtgic agtttcaggg atatgcatg ttcttctct gttctttct gtcaataca gcttttgat cttnacacg gtagocaaag aagaaggaa tgaaggaaata gtagtgctc taacctgtgt agtagagctgc caggtctccac tgaatacaaa cgggtctcta ctgttttc tctatctt tataccaat gtcgccaagg tgttatata cagaagata tttttgttg ccaagcatca ggttagagag atagaaagta cagccagoca agctcagctc tcttcagaga gttaacaga aagtagaga aaaaagaga gaaggagctgc caaaacctg ggaattgcta tggcagcaat tctgtctct tggtaacct accctgtga tgcagtgat gtagtgata tgaatttat aaactctct tatgttaag agattttgt ttggtgtgt tatataat cagctatgaa cccctgatt tatgtctct ttaccaatg gtttggagag gcataaaaac ttattgaag cggcaaggct taaagagctg atctgcaac aactaattia ttcttgag aagtagagag agataa MVNNFSQAEA VELCYKNVNE SCIKTPYSPG PRSILYAVLG FGAVLAAFGN LLVMIAILHF KQLHTPTNFI IASLACADFL VGVTVMPFST VRSVESCWYF GDSYCKFHTC FDTSTCFASL FHLCCISVDR YIAVTDPLTY PTKFTVSVSG ICIVLSWFFS VTYSFSIFYT GANEEGIBEL VVALTCVGGC QAPLNQNWVL LCFLFFIPN VAMVFYISKI FLVAKHQARK IESTASQAQS SSESQKERYA KRERKAAKTL GIAMAAFLVS WLPYLVDVI DAYMNFITPP YVYEILVWCV YYNSAMNPLI YAFFYQWFGK AIKLIVSGKV LRIDSSTNL FSEEVETD	A	Homo sapiens
				atgaatgagc cactagacta tttagcaat gctttcgatt tccccgata tgcagctgct ttggaaat gcactgata aaaaacca ctaaagagc actactccc tgtatttat ggcattact tctctgtggg atttccaggc aatgcagtag tgaataccac ttacttttc aaaatgagac ctggaaagag cagcaaccatc attatgcga accgtggctg cagagatctg ctgtatctga ccagctctcc cttcttgatt cactactatg ccagtggcga aaactggatc ttggagat ttatgtraa gttttccgc ttacgtctcc attcaact gtatagcagc atctcttcc tcaactgtt cagctatcic tgcactgtg tgaatca ccaatagagc tgcitttoca ttcaaaaac tgaatgca gtttagctt gttgtgtgt gtagatcatt tcaatgtag ctgtatcc gtagacttc ttgatcat caaccaacag gaaccaaga tgaagctgtc tgcactcac cagttcgagat gaactaala ctataaagtg gtacaactg gtatagctg caactctt ctgtctccc ttgtgtatag tgaacttg ctataccag ataatocaca ctctgaccca tggactgtcaa actgacagct gctttaagca gaagacaga aggciaacca ttctgtact ccttgcat ttactgttt tttaacctt ccatatctg agggcatc ggaatgac tgcctgtct tcaatcagtt gttocattga gaatcagatc calgaagctt acatgcttc tagaacatta gctgtcttga acaacttgg		
645	191193	Trace Amine Receptor 3 (TA3)	AAK71240.1		P	Homo sapiens
646	191196	G Protein- Coupled Receptor GPR80	AF411109		A	Homo sapiens

647	191196	G Protein-Coupled Receptor GPR80	CAC51133.1	MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVY GIIFLVGFPG NAVVISITYIF KMRPWKSSTI IMLNLACTDL LYLTSPLFI HYYASGENWNI FGDFMCKFIR FSHFNLYSS ILFTCFSEF RYCVIHPMS CFSIHKTRCA VVACAVVWII SLVAVPTMF LITSNTRNR SACLDTSSD ELNKTWYNL ILTATTFCLP LVIVLCYTT IHTLTHGLQ TDSCLKQKAR RLITILLAF YVCLPFIHL RVIRIESRL SISCSENIQI HEAYTVSGPL AALNTFGNLL LYVVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP toctigococ thaataang acthaactc tteagcttc tcegttctc toctigaaaa cagegggcggt aattaocaca taacagcgig gicaiigaana tcegtigaaca tceagcaggti gctcaagict ttttttgt tccagggcgca ctagtggagg tttctigagc atgagatocaa ccatcccgcg ctagggagaca gaaagiacaa cagfigaatgg aagaacaaa gcoctcttc tgccttggg caaggaagac ctgaatccgg tctctgat cttttact ggcctggtag ggcctggagg aaaaagcttt gicctcagc tctggctgti cagcagcgc aggaagcgct tctctgcta cgtccatcag ctagccgggg cgagctct cttctcgtg tccagatua taatitgcd gfigtlaotc agtaactct tctgtocat cttcatat ttoctagct tcttccac tfigatgaoc tfigtcciaoc tfigcaggti gtagcagcgc agcacccgca gcaocgagcg ctagcctgtoc gttctggcg ccatctggta tgcctggocg cggccccagac acctgicagc ggctggigt gttctgctct gggccctgic cctactgctg agcatctgg aaggggaagt ctagcttc ttaattagtg atggtagac tgggtgggti cagacattg atttccac tgcagcgggcg ctagatttt taltcatgt tctctgggg tccagctcgg cctgtctggt caggaatoc tfiggttoca ggggtctggc actgaacggg ctagctcag ccatctgct cagcagcgti gicgttccoc tctggcgct gcocttggc attcaggti tcttaaat atggatctgg aaggaatcgg atgtctatt tigtatcti catctocct cagttgtct gttactcti aacagcagtg ccaacoccat cattacttc ttcgtgggt ctttagggaa gtagtggcgcg ctagcagcgc cgtactocaa gctggctctc caggaaggtc tgcaggacat tgcgtgggti gttacagtg aaggtgagcti cgtcagggcg acccggaga tgcgtgagag cagctctggg tagagatggga cagcctctac ttccatcaga tataatggcg tttggaagcg aacttgoc cgtctgct gatttgca actttcag tctgattt aaaaagta aggaaggti tggtagggat aagtagaca MDPTPAWGT ESTTVGNQDQ ALLLCKET LIPVFLILFI AL VGLVGNF VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQINCLVYL SNFFCSISIN FPSFTTVMT CAYLAGSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC VLLWALSLL SILEGKFCGF LFSDGDSGWC QTDFDTAAW LIFLFMVLCG SSLALLVRIL CGSRGLPLTR LYLITLLTVL VFLCGLPFG IQWFLILWV KDSDVLFCHI HPVSVVLSSL NSSANPIYF FVGSFRKQWR LQQPILKAL QRALQDIAEV DHSEGCFRQG TPMSRSSLV	A	Homo sapiens
648	191218	MrgX2 G Protein-Coupled Receptor	AY042214	toctigococ thaataang acthaactc tteagcttc tcegttctc toctigaaaa cagegggcggt aattaocaca taacagcgig gicaiigaana tcegtigaaca tceagcaggti gctcaagict ttttttgt tccagggcgca ctagtggagg tttctigagc atgagatocaa ccatcccgcg ctagggagaca gaaagiacaa cagfigaatgg aagaacaaa gcoctcttc tgccttggg caaggaagac ctgaatccgg tctctgat cttttact ggcctggtag ggcctggagg aaaaagcttt gicctcagc tctggctgti cagcagcgc aggaagcgct tctctgcta cgtccatcag ctagccgggg cgagctct cttctcgtg tccagatua taatitgcd gfigtlaotc agtaactct tctgtocat cttcatat ttoctagct tcttccac tfigatgaoc tfigtcciaoc tfigcaggti gtagcagcgc agcacccgca gcaocgagcg ctagcctgtoc gttctggcg ccatctggta tgcctggocg cggccccagac acctgicagc ggctggigt gttctgctct gggccctgic cctactgctg agcatctgg aaggggaagt ctagcttc ttaattagtg atggtagac tgggtgggti cagacattg atttccac tgcagcgggcg ctagatttt taltcatgt tctctgggg tccagctcgg cctgtctggt caggaatoc tfiggttoca ggggtctggc actgaacggg ctagctcag ccatctgct cagcagcgti gicgttccoc tctggcgct gcocttggc attcaggti tcttaaat atggatctgg aaggaatcgg atgtctatt tigtatcti catctocct cagttgtct gttactcti aacagcagtg ccaacoccat cattacttc ttcgtgggt ctttagggaa gtagtggcgcg ctagcagcgc cgtactocaa gctggctctc caggaaggtc tgcaggacat tgcgtgggti gttacagtg aaggtgagcti cgtcagggcg acccggaga tgcgtgagag cagctctggg tagagatggga cagcctctac ttccatcaga tataatggcg tttggaagcg aacttgoc cgtctgct gatttgca actttcag tctgattt aaaaagta aggaaggti tggtagggat aagtagaca MDPTPAWGT ESTTVGNQDQ ALLLCKET LIPVFLILFI AL VGLVGNF VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQINCLVYL SNFFCSISIN FPSFTTVMT CAYLAGSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC VLLWALSLL SILEGKFCGF LFSDGDSGWC QTDFDTAAW LIFLFMVLCG SSLALLVRIL CGSRGLPLTR LYLITLLTVL VFLCGLPFG IQWFLILWV KDSDVLFCHI HPVSVVLSSL NSSANPIYF FVGSFRKQWR LQQPILKAL QRALQDIAEV DHSEGCFRQG TPMSRSSLV	A	Homo sapiens
650	191222	G Protein-Coupled Receptor Ls191222	LG94359	toctigococ thaataang acthaactc tteagcttc tcegttctc toctigaaaa cagegggcggt aattaocaca taacagcgig gicaiigaana tcegtigaaca tceagcaggti gctcaagict ttttttgt tccagggcgca ctagtggagg tttctigagc atgagatocaa ccatcccgcg ctagggagaca gaaagiacaa cagfigaatgg aagaacaaa gcoctcttc tgccttggg caaggaagac ctgaatccgg tctctgat cttttact ggcctggtag ggcctggagg aaaaagcttt gicctcagc tctggctgti cagcagcgc aggaagcgct tctctgcta cgtccatcag ctagccgggg cgagctct cttctcgtg tccagatua taatitgcd gfigtlaotc agtaactct tctgtocat cttcatat ttoctagct tcttccac tfigatgaoc tfigtcciaoc tfigcaggti gtagcagcgc agcacccgca gcaocgagcg ctagcctgtoc gttctggcg ccatctggta tgcctggocg cggccccagac acctgicagc ggctggigt gttctgctct gggccctgic cctactgctg agcatctgg aaggggaagt ctagcttc ttaattagtg atggtagac tgggtgggti cagacattg atttccac tgcagcgggcg ctagatttt taltcatgt tctctgggg tccagctcgg cctgtctggt caggaatoc tfiggttoca ggggtctggc actgaacggg ctagctcag ccatctgct cagcagcgti gicgttccoc tctggcgct gcocttggc attcaggti tcttaaat atggatctgg aaggaatcgg atgtctatt tigtatcti catctocct cagttgtct gttactcti aacagcagtg ccaacoccat cattacttc ttcgtgggt ctttagggaa gtagtggcgcg ctagcagcgc cgtactocaa gctggctctc caggaaggtc tgcaggacat tgcgtgggti gttacagtg aaggtgagcti cgtcagggcg acccggaga tgcgtgagag cagctctggg tagagatggga cagcctctac ttccatcaga tataatggcg tttggaagcg aacttgoc cgtctgct gatttgca actttcag tctgattt aaaaagta aggaaggti tggtagggat aagtagaca MDPTPAWGT ESTTVGNQDQ ALLLCKET LIPVFLILFI AL VGLVGNF VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQINCLVYL SNFFCSISIN FPSFTTVMT CAYLAGSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC VLLWALSLL SILEGKFCGF LFSDGDSGWC QTDFDTAAW LIFLFMVLCG SSLALLVRIL CGSRGLPLTR LYLITLLTVL VFLCGLPFG IQWFLILWV KDSDVLFCHI HPVSVVLSSL NSSANPIYF FVGSFRKQWR LQQPILKAL QRALQDIAEV DHSEGCFRQG TPMSRSSLV	A	Homo sapiens

[illegible]

[illegible]

[illegible]

[illegible]

656	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	<p>gcaaaaggag cagaacaag ggaattcaag acccagaatg taggtgcac tagctctat gttacaggga tcttcgtgg ccctagcac ctggctgca ggaagtgact ccgttccat cctcttat tocttaaa agggaaaaat gactgtacg acctgtca caaactct actttgca ttgtctgc tgcacagac tgaagactt aaaaattgt tacgtttac aagtcacgat tcaaaaatg tttaactt gttacact caaacttg agttacac ttgttaca gtatataat ttttctt tgttocaag tgaagtgag ggaagtgagg agagagactt ggaagaccca cctgtgagga cctgaacct gcaacttga ggggtttct aatcccaagg tctccaggc ggaagtgacg ccttgagtc cgtttaacag cagatccaga agactcttag agtaggcgc cttaaccac gggggagagt ggcctggcag ggcctggggg tgcctgtgac agacacctcc tcaaccacca cccaigcat actctggga agcagcttcc tggagatta gaaatttacc ttccctgact ggaactaaat cccaccagcc aggaaccaca ctctcttac ogagagagac cccagctctt gaaaggctga gggcctgct ggggggtggg ggggtctt actatgctt aggtttcga gtagccctc tctggggtc cctctcca gccacgggc cctcttct gctgtgtaa atgttccgt gaagccgagc tctgttgg gaataact ctatagaaa caaaa</p> <p>MMARRPPWRG LGERSTPILL LLLSLFPLS QEELGGGGHQ GWDPLAATT GPRAHIGGA LALCPSSGV REDGGPGLGV REPfVGLRG RRQSARNRG PPEQNEELG IEHGVQLGS RERETGQPG SVLYWRPEVS SCGRITGPLQR GSLSPGALSS GVPGSGNSSP LPSDFLRHH GPKPVSSQRN AGTGSRRVG TARCCGELWA TGSKGQGERA TTSGAERTAP RRNCLPGASG SGPELDSAPR TARTAPASGS APRESRTAPE PAPKRMRSRG LFRCRFLPQR PGRPPGLPA RPEARVTS NRARFRRAAN RHPQPQVNY QTLVPENEA GTAVLRVVAQ DPDAGEAGRL VYSLAALMNS RSELEFSIDP QSGLRTAAA LDRESMERHY LRVTAQDHS PRLSATTMVA VTVADRNDHS PVFEOAQYRE TLRENVEEGY PILQLRATDG DAPPNANLRY RFVGPAAARA AAAAFAEIDP RSGLISTSGR VDREHMESE LVVEASDQOQ EPQPRSATVR VHTVLDEND NAOQSEKRY VAQVREDVRP HTVVLRVAT DRDKDANGLV HYNISGNSR GHFAIDSLTG EIQVAPLDF EAEREYALRI RAQDAGRPL SNNITGLASIQ VVDINDHIPI FVSTPFQVSV LENAPLHSV IHQAVDADH GENARLEYSL TGVA PDTFFV INSATGWVSV SGPLDRESVE HYFFGVEARD HGSPLSASA SVTVTVLDVN DNRPEFTMKE YHLRLNEDAA VGTSVSVTA VDRDANSALS YQITGGNTRN RFAISTQGGV GLVTLALPLD YKQERYFKLV LTASDRALHD HCYVHINTD ANTHRPVFS AHYSVSVNED RPMGSTIVI SASDDDVGEN ARITYLLEDN LPQFRIDADS GATLQAPLD YEDQVITYLA ITARDNGIPQ KADITYVEVM VNDVNDAPQ FVASHYTGLV SEDAPPFTSV LQISATDRDA HANGRVQYTF QNGEDGDGDF TIEPTSGIVR TVRRLDREAV SVYELTAYAV DRGVPLRTP VSIQVMVQDV NDNAPVFP AE EFEVRKENS IVGSVVAQIT AVDPDEGPN HIMYQIVEGN IPELFQMDIF SGELTALIDL DYEARQEVY VQATSAPLV SRATVHVRV DQNDNSPVLN NFQILFNHYV SNRSDTFPSG IIGRIPAYDP DVSDHLFYSF ERGNELQLLV VNQTSGLRL SRKLDNNRFL VASMLVTVID GLHSVTAQCV LRVVIITEEL LANSLTVRLE NMWQERFLSP LLGRFLEGVA AVLATPAEDV FIFNIQNDTD VGGTVLNVSF SALAPRGAGA GAAGPWFSSE ELQEQLYVRR AALARSLLD VLPFDDNVCL REPCENYMKC VSVLRFDSSA PFLASATLF RPIQPIAGLR CRCPPGFTGD FCEITELDLCY SNPCRNGGAC ARREGGYTCV</p>	P	Homo sapiens
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DTEAGRCV PGVCRNGGTC TDAPNGGFR CQCPAGGAFEG
 SSFVFRG LRQRFHLTSLSFATVQOSG LLFYNGRLNE
 QVRLTYST GESNTVVSPT VPGGLSDGQW HTVHLRYYNK
 SKDKVAVL SVDDCDVAVALQFGAIGNY SCAAAGVQTS
 LGVNPENFPVSHKDF IGMRDLDHID GRRVDMAAFV
 KLHFCDSOP CKNSGFCSEWGSFSCDCPV GFGGKDCQLT
 TLSWFGSD MAVSPWYLG LAFRTRATQG VLMQVQAGPH
 SVTVTRGS GRASHLLDQ VTVSDGRWHD LRLLEQEEP
 LDFSLFQDT MAVGSELQGL KVKQLHVGG LPPGSAEEAPQ
 GSTPSGSPA LLPSHRVNA EPGCVVTNAC ASGPCPHAD
 QPGYYGPG CVDACLNP CQNGSCRHLPGAPHYTCDC
 RMDQQCRG WWSPTCGPC NCDVHKGFDP NCNKTNGQCH
 SCLPCDCY PVGSTRSCA PHSGQPCRP GALGRQCNSC
 RVL YDACP KSLRSGVWVP QTKFGLATV PCPRGALGAA
 EPDLFNCTSPAFRELSLLL DGLELNKTAL DTMEAKKLAQ
 TFSQDVRT ARLLAHLLAF ESHQQFGLT ATQDAHFEN
 TGDWAAAL GQRAPGGSPG SAGLVRHLEE YAATLARIME
 NIMLSIDR MEHPSPRGA RRYPRYHSNL FRQDAWDPH
 SPSEVLPT SSSIENSTTS SVVPPAPPE PEGISIIL LVYRTLGGLL
 LPPQNPVMN SPVSVAVFH GRNFLRGILE SPISLEFRLL
 WDPPLGLAE QHGVWVTARD C ELVHRNGSHA RCRCSTRTGTF
 EGDLELLA VFTHVVAVS VAALVLTAAI LLSLSLKS
 GVAELELL LGHRTNQL VCTAVAILLH YFFLSTFAWL
 VEPRNVDRG AMRFYHALGW GVPVLLGLA VGLDPEGYGN
 IWSFAGPV VLVVMNGTM FLAARTSCS TGQREAKKTS
 VSASWLF GLLAVNHSIL AFHYLHAGLC GLQGLAVLL
 WMPACLGRK AAPEEARPAP GLPGGAYNNT ALFEESGLIR
 ARSGRTQ DQDSQGRSY LRDNVLRHG SAADHTDHS
 AMFRDAGA DSDSDSL EEERSLSIPS SESEDNGRTR
 SERLLTHP KDVDGNDLLS YWPALGECEA APCALQTWGS
 ANNNOPDP ALTSGDETS L GRAQRKGI LKNRLQYPLV
 RAATLGRH AVPAASYGRI YAGGTGSLSPASRYSSRE
 ERLEEAPVPLRPLSRPG SQECMDAAPG RLEPKDRGST
 AMAGRFGS RDALDLGAPR EWLSTLPPR RTRDLDPQPP
 DPLPSRP LDSLSSNS REQDQVPSR HPSREALGPL PQLLRAREDS
 LDLSLIL ASFNSSALSS VQSSSTPLGP HTTATPSATA SVLGPSTPRS
 EVPRSEGH
 cca gctccaac agcagttggc cctaagta gaaagagact aacactagg ccaaccggc
 t cctaataca gcaacccc cctggaggc caatgta tggcctat ggcctact tctgctg
 tag tctgtcat cgtgtcaag aaccggcaca tgcatactg cacaacatg tcatcctca

Homo sapiens

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660	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	<p>MKVGVLWLIS FFTFTDGHGG FLGKNDDIKT KKELIVNKKK HLGPEVEYQL LLQVTRYDSK EKRDRLNFKK LKPPLLWSH GLIRIRAKA TTDCNSLNGV LQCTCEDSYT WFPSPCLDPQ NCYLHTAGAL PSCECHLNNL SQSVNFCERT KIWGTFKINE RFTNDLLNSS SAIYSKYANG IEIQLKKAYE RIQGFESVQV TQFRMSLLSP KLECNGTI</p>	P	Homo sapiens
661	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NM_030774	<p>atgagtctt gcaacttca acatgcaac ttgtgctta ttggtatcc aggatagag aaagcccat tctgggtgg cttccctc ctttcagt atgtatggc aatgttggg aactgacg tgggttcat cgtatagag gaacgagcc tgcacgtcc galtgaacct ttctctgca tgcctgagc catgactg gctttatoca catccactt gcttaagatc ttgctctt tctgttga ttccgagag atagcttg aggcctgct taccagaig ttctttatc atgcctct agccatgaa tccactacc tgcctggcat ggccttgac cgttatggc ccatgcca cccactggc catgctgag tgcctcaaa tacaagaa gccacagatg gcatcgtggc tgggtccgc ggatccctt tttttcc actgcctctg cgtatcaagc ggctggcctt cgtccactc aatgctct cgactctta ttgttccac catgagaa tgaatgggc ctatgcaag acttgcca atgttgata tggcttact gcatctgc tggctatggc cgttgagca atgttact ctgttctta ttcttgaa atacgaacgg ttctgcaact gctttocaa tcaagagggg ccaaggctt tggacactg ggtcacaca ttgtgtgtg actgccttc tatggccac ttatggcct ctactgtga caccgttg gaaacagcct tcatccactt ggtcacaca ttgtgtgtg actgccttc ctactgtg gctgtcctc cgtcatcaa tccatcalt tatgttga aaaccaaa gatacaaca cgggtgtctg ctatgtcaa gatcactg gcaagagact tgcaggctg gggagggcaag tga MSSCNFTHAT FVLGIPGLE KAHFWVGFP LLSMVVAMFG NCIVVFVIRT</p>	A	Homo sapiens
662	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	<p>ERSLHAPMYL FLCLMLAADL ALSTSTMPKI LALFWFDSRE ISFEACLTM FFIHALSAIE STILLAMAFD RYVAICHPLR HAAVLNNTVT AQGIVAVVR GSLFFPLPL LIKRLAFCHS NVLSHSYCVH QDVMKLAYAD TLPNVVYGLT AILLVMGVDDV MFISLSYFLI IRTVLQPSK SERAKAFGTC VSHIGVVLAF VYPLIGLSVV HRFGNSLHPI VRVVMGDIYL LLPVVPNPI YGAKTKQRT RVLAMFKISC DKDLQAVGGK</p>	P	Homo sapiens
663	194743	FLJ14454	NM_032787	<p>acttttca tgtctctt ggtgtgagga tgaagaaat gaaagcagag tatgacacti ttatagagag attcaactg catctactg gattagcttc aaagctcta aaatacaag acatccactt gacagatcac tgaagggaggg actgtttt cigttttga atagtttccg attaaacti ttatgtcaag aagaagaaga gctagtatt tctaccccaag ggtgtggtt gttgtttggc ttacacatgg cttctgccc tgccttgaac cttaggggic tgggtgtgt cgtgtgtgtga ctactgtac gcatcattt gggactgggc atctggagga ttgtgtacag gattccaaaga ggaataacta ctctcalt aaagcaccct acagatgtct gcatgtatgg tggaaacctgg gaaatggca gattgtattg tacaagaag tggaaaggaac tgaagatgac aatgttcaat ttgttgaaa atagtactta tatgggttt actttggcca gatatccaggt gggcagatatt ggaacalctt tgaacacatg tggcaagagat actccaalg cgggcaatcc aatggcagtc cgggtgtgtga gtcctcctc atagtgtgag atagaaatgac aaaaagtgac aataggaaat tgcaltgaaa atctgggaac ccttggaag caggtgagag agtgcacagc accacttaat aacattct ctgaagtcca gatttataa tctgtatgcca ataaatgac tgcgtgagac atcactgtg ctacgtcaggt ggttggacag atattcaaca ctccagaaa tgcctacat gagggcaaga aatgttccat agtaacagtg agtcaactcc tatgtgccag tgaagatgct ttcaagagag ttgtgtctac tgcataatgat gattgacctta caacgcttat tgaagaaalg gtagacttatt cctgtctt tgggtatcaaa tcaagtggtg aaacttaacat agcaatataag tcaagaaat tctcttca aatgtcgttg ggggtcttcaa atgttctgt ctctgtgacag aagtgagctga gcatgtctc agttctagt tcaacatla tacaacaaa tgggtgagtc cttaaccca agtcaagac tgaagcttca gttctgtcta atagtacgaa aaattacacc aagacatggc gctttgtagt ttatcaaat gataagctt tcaatcaaa aacttttaca gctaaatcag attttatga aaaaattatc tcaagcaaaa ctgatgaaa tgaagcaagt caggtgtgtgt cgtgtgacat ggtctttagt ccaagatga accaaaaaa attcaactc tatctatg cctgtgtcta ttggatttg tcaagcgaag actggagacac atagtgtctc caaaaaagaca agtggtcactga tggattctgc cgtgtgcccgt gcaacacalac tactaatit gctgttataa tgaatttcaa aagtgatatt caatatoca</p>	A	Homo sapiens

664	194743	FLJ14454	NP_116176.1	
665	194745	G Protein-Coupled Receptor SLT/MCH2	NM_032503	

aaccatttgc actgacacgt tgggaagaca ggtacaagac caccggatc aatttgggoc ttggcgagc ttctttalc
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 gtaacttgg atacattta ttgacgata acaactttt ttctccctt acccttgat ttgggtgct atattttaa ttatgctat
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 aalcacatt ttgggaagat acatggatca ccatgagct agacatgati gtaacttca ctggatatt tagaaagggc aggtgacccg
 atattttat gccatttct ctgtgtact ttgacttct agcgacatgg aagagaagtg taacatgca aatacaatga gcttaalatg
 ctactgtaa aaaaaaaa aaaaaaaa

Homo
sapiens

NP_115892.1
 G Protein-
 Coupled Receptor
 SLT/MCH2

666 194745

ccacacac aggaacccga tcttgggtga tgaagcaga caagcagcag ctgggtgagt gctaacgctc agataagcat
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 cttaagtat gccgtgcttt tgggacagac tattactca gacgtaga ca ctgggctttt ggggacattc cctggcgagt ggggctctc
 acgttgcca tgaacagggc cggggagcalt gttgtctta cgggtggggc tgcggacagc tatttcaag tgggtccacc
 ccaccagcg gtaaacacta tctccaccc ggtggcgggct ggcaltgtct gcaacccgtg gggccctgggc atctgggaa
 cagtgtatct ttgtctggag aacattctct gctgtgcaaga gacggcgct tctgtgaga gcttcaat ggaagtcggc
 aatggctggc atgaacat gttccagctg gattctta tgcctctgg calcatctia ttgtctct tcaagattgt ttggagcctg
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 aatttaca caagctcaaa atctgagtc tgaacccaa gacgacagga cactcaaaa cacaagggcc ggaagagatg
 ccaatttga acctggctg cagaggtgc atcaggttg caaatagttt ccaagccag tctgatgggc aatgggaltc
 ccacattgt gattggcact gaacagcag accaaca ca ctgaagaga taggtgggtg acttgaatt aacttggct
 aaggggtcgg gggcttga aatggccacc cctttctia ttgcaagagc gcttctgca catgaactgc atcttctca ttctgtcaga
 aatgaattc acacaactat acctttggg gaggltccag tt

Homo
sapiens

NP_032554
 Chemokine
 Receptor
 FKSG80/GPR81

667 194756

MYNGSCCREE GDTISQVMP PP LLIVAFVLGA LGNGVALCGF CFHMKTWKPS
 TVYLFNLAVA DFLMCLPF RTDYVLRHRH WAFGDPCR V GLFTLAMNRA
 GSIVFLTVVA ADYFKVWHP HHA VNTISTR VAAGIVCTLW AL VILGTVYL
 LLENHLCVQE TAVSCSFIM ESANGWHDIM FQLEFFMPLG IILFCSEKIV
 WSLRRRQQLA RQARMKKATR FIMVVAIVFI TCYLPSPVSAR LYFLWTVPPSS
 ACDPSVHGAL HITLSFTYMN SMLDPLVYTF SSPSPPKFYN KLIKCSLKPK

Homo
sapiens

NP_115943.1
 Chemokine
 Receptor
 FKSG80/GPR81

668 194756

669	194757	G Protein-Coupled Receptor Ls194757	AL162032	QPGHSKTQRP EEMPISNLGR RSCISVANSE QSQSDGQWDP HIVEWH	Homo sapiens
670	194757	G Protein-Coupled Receptor Ls194757	CAB2385.1	<p> gfcalgjzagt gctcgcacgsg gscctctcggg agagctcggag acgfaagacag ccacacacag cagcaaaccca gcttcgtgt actcgccct cctcgactc agctcgcggag aggggggtctg gtcgcaaacac ggctgtgctgc tcaagagagsg aaacctcac tactccgtct gcccgctgcac tcaactcac aactctgca tctactgca gggtgtgtcccg ctggagagctca acattggcat cctcaltgct gtcgacagag tcaitctaca gatacagccg gatacactaca agatccatag agtccccagt gccccaaagt tgaagcgcaa ggcaagtggcc gtcctgtctgc ccactcggg tactctgggg gctcttgggg gctctgtgt caacgggtgt gctgtgggt tccagtacat gtttggccag ctcaactcc tgcagggggact gttcaltat ctttttt gctctgaa ttcagaggtgt agagccgct tcaagtcaca aacaaaggtc tggctgctca cgaagcagctc ccgccgcaccc tccaacgcca agcccccca ctcggaactc algaagtggtga cccggccacag ctatggccctc aacacggctca ggctgtgggca gaaagtgcaag caactctccc accgctgcga cctgtcagcc gttgtgagccgg ggagggctgtcc aacacggctca ggctgtggctc agagcaaac ccccaaaca gaaatgaagtg cccacattt gcccagtgga cctctctgt cctcgtctgt gataaggggtgt ttgtggcccc ggaagcagctgt tctccccgt tgaactggc gttccgggca cactgtctag cccagtcagg gccaagcggtt gttacggctgggg ggccccctgc ctgttcca cccgtggggct gtaggtgactc ctcgggggagat tccagtgatca cagtggctgt actgttagtgsg tgccccgtag cctccctca tcaactagca tcaagccag cgaagccaggg acactcgggggg cccggctcccg agcaacagggga gggggtgagtc agccccgtgt ccttgggggg gtttggggag tcaagggccca agtaggtgtgt caggttcccc cgtccccca gtacagcgcca ggcaagctgggg ggtgtgtgtgggg gaaagtagcag ctggaggtcccc agtgtctgaa tccactgtagt gggtgaggtcc ccacagcgccg cgtctagccgt gggtgtgtgtct tctgtaggtgt gttccgggtt ggggccaaact gttgtgtgtct atcaggttggg ggccccctgc caagccagcg tcaagccaggg ggccggggagtc gttgactctc caggtgtgaaggg cgaacccccct ggccccct tgctggggggct cctctgtc actgttagagag cccgtctgggg ccttgaagctt gctctgaaggtt gctctgtgtt gggtggagagctt ctcggggcac cgtctgttagt ttgtctctt tgggaaccaa ttccggctta agtagctcca agtagctcca cttccccgt tggcagccct ctgggtgtt cttggggccag agtaggtctgg cgtgttcccc caggttcccc gttccaggtgt gaaaggtggag ggcatcttcc aggggcactgc ttccccaga ggctctcca tggctcacag gtcactctac aggtttctaa tggggcagacc accgctggcagg tagtcaagtg cgtctccgtct gggtcacatc agaaccgact gctcgttaggt cccactgac tggtagagggga gggtcgtgtgtga cagctccgtgtc ttctgtgtgt aggggtgaatt agggactcag actcagcccc agtaggtgtag tgaataattt taitgtgacca tgtgtggcca tgactctgtt gaaacacaggt ttgggtacat agtagtgaat taagtaacaca ccgtagatagc ggctgtgttaggg ttacatgtt gctgtagagca ctcgtgtgtt cttgtgaagtg tgggtgaagag attcaaacct gggtttgata ctgggaaact ttctttaaa actgttgaaca tgattacat cagcccccc acacccccat gtttccccgt ttctaggtgt agttttat ggagctctgtt ggccccctt agccccactg gtgtctctt aatgtaac ttccccgt cgtctgtgaggt gtagaacctca tctggcagggcc tctctgtcat gggtggaggggtga gggtcagggagc agcatgtctg caggggggtga cctttgtct tctgtcagggc gtagggccaggg ctggccacagc cacttggcaac atgtgtgacag tggccgggg cctgtgtatg gccccgtca cccgtgtctg ctgtggggccac ctggctgtctg cagggccaggg ccgtgtctca gttgaagag ccatgttag taitgtgctaa agttccatgt tttagccatg cccacagggc cccgtgtcccc agaaacacag tcaatggag cacagtgcca gatactcacc accgctgggt gacactagaa gtagagaaac gtagtacct caatgtacac ttgggtatt cctttatt agttttagt gaaacaaac agtagagagaa ctactttag tttagagtgaa atatttgt ttaattgt gcccattca tcaatagc taatttca agtagagtaa tgaacaaac ctgtctaac cttgtttc caatgtatga aagctatgca cttattat agggctatg ttgtggctc tgcagtagt ttattatc tacaataatt ggccaaaaat aagaatagg aagaatgaa agtttaggt taitgttagaa gaaagtagt gacactaagt tgtgaataa tgtgtgatt ttatgaat aadactagt ctggaataa aaaa </p>	Homo sapiens

[illegible]

680	194905	G Protein- Coupled Receptor MGC7035	LR112	<p>ccctctgccc ttacgctccc tcagcattca gtttgicaat gaagigalga aagcttagag ccagtiattia tactttigigs ttaaaact</p> <p>tgattccccc tigtgtgttt tacaaaaca gatgttctct agaaaaalga caaatagtaa aatgaacaaa accctacgaa agaatggcaa</p> <p>cagccagggt ggcggggccc tgcagtggtg ccgggtgtgc tagcaaggcc tgcagtggtg gccagtgatg ccacagggt</p> <p>ctgagaacat ticacagaag tgcctgagac gcggagacat ggcctggtgt aatggagct atcaatagc agtgagcgc</p> <p>tcctctagc caccaatgt cctgacaoc ctcacagcc ccacagata acatcagctg aggttttt cagatgaac ctgctctaaa</p> <p>tcaattctc aaagtgtga caaaactaa gaataataat aaacaaaaga aaggigaaa aaaaaaaa aaaaa</p> <p>MWSCSWFNGT XLVEELXACQ DLQLGLSLLS LLGLVVGVPV GLCYNALLVL</p> <p>ANLHKSAMT MPDVVYFVMA VAGLVLSALA PVHLLPPSS RWALWSVGG</p> <p>VHVALQIPFN VSSLVAMYST ALLSLDHYE RALPRTYMAS VYNTRHVCVF</p> <p>VWGGALLTSF SSLFYICSH VSTRALECAK MQNAEAAADAT LVFIFYVYVPA</p> <p>LATLYALVLL SRVRREDTPL DRDTRLEPS AHRLLVATVC TQFGLWTHPY</p> <p>LILLGHTVII SRGKPVDAHY LGLLHFVKDF SKLLAFSSSF VTPLLYRYMIN</p> <p>QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA</p> <p>TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGCGCCG GGAATGTCC</p> <p>CTGAATGCGC GCGGCAGCG GCGACGCGC CCTTGGCGAG CCTGGAGCAA</p> <p>GCCAAACGCA CCGCTTTCC CTCTCTCC GACGTCAA GG GCGACCAACCG</p> <p>GCTGGTCTG CCGCGGTGG AGACAACCGT GCTGGTGCTC ATCTTTGACG</p> <p>TGTCGTGCT GGGCAACGTG TCGGCTGG TGCTGTGGC GCGCGACGA</p> <p>CGCCGGCG CCACTGCTG CCGTGTACTC AACCTCTTCT GCGCGGACCT</p> <p>GCTCTTATC AGCGTATCC CTCTGTGCT GCGCGTGGC TGGACTGAGG</p> <p>CCTCCTGCT GGGCCCGT GCTGCCACC TGCTCTCTA CGTGATGACC</p> <p>CTAGCGGCA GCGTACCAT CCTCAGCTG GCGCGGTCA CCCTGGAGGG</p> <p>CATGGTGRG ATCGRGACC TGGAGCGCG GCGCGGGGT CCTCGCGGC</p> <p>GGCGCGGC AGTGCTGCT GCSCTCATCT GGGCTATTC GCGGTGCGC</p> <p>GCTCTGCTC TGTGCTCTT CTTCGAGTC GTCCCGCAAC GGCTCCCGG</p> <p>CGCCACCAG GAAATTGCA TTTCACACT GATTGGCCC AGCATCTC</p> <p>GAGAGATCT GTGGATGTC TCTTTGTA CTTTGAACCT CTTGGTCCA</p> <p>GGACTGGTCA TTGTATCAG TTACTCCAA ATTTACAGA TCACAAAGG</p> <p>ATCAAGGAAG AGGCTACCG TAAGCTGGC CTACTCGGAG ACCCACCAGA</p> <p>TCCGGTGC CCAGCAGGAC TTCGGCTCT TCCGCAACCT CTCTCTCCTC</p> <p>ATGGTCTCT TCTTCATCAT GTGGAGCCC ATCATCATCA CCATCTCT</p> <p>CATCTGATC CAGAACTTCA AGCAAGACT GGTATCTGG CCGTCCCTCT</p> <p>TCTTCTGGT GGTCCCTTC ACATTGCTA ATTCAGCCCT AACCCCATC</p> <p>CTCTACACA TGACACTGT GAGGAATGAG TGGAAAGAAA TTTTGTCTG</p> <p>CTTCTGTTT CCAGAAAAG GAGCCATTTT AACAGACACA TCTGTCAAAA</p> <p>GAAATGACTT GTCGATTAT TCTGGCTAAT TTTCTTTATA GCCGAGTTT</p> <p>TCACACTGG CGAGCTGTG CATGCTTTA AACAGAGTTC ATTCCAGTA</p> <p>CCCTCCATCA GTGCACCCCTG CTTTAAGAAA ATGAACCTAT GCAAAATAGC</p> <p>ATCCACAGCG TCGGTAAAT AAGGGGTGAT CACCAAGTTT CATAATATT</p> <p>TCCCTTTATA AAAGGATTG TTGGCCAGGT GCAGTGGTTC ATGCTGTAA</p>	P	Homo sapiens
681	194907	G Protein- Coupled Receptor 14273	LD22826	<p>ccctctgccc ttacgctccc tcagcattca gtttgicaat gaagigalga aagcttagag ccagtiattia tactttigigs ttaaaact</p> <p>tgattccccc tigtgtgttt tacaaaaca gatgttctct agaaaaalga caaatagtaa aatgaacaaa accctacgaa agaatggcaa</p> <p>cagccagggt ggcggggccc tgcagtggtg ccgggtgtgc tagcaaggcc tgcagtggtg gccagtgatg ccacagggt</p> <p>ctgagaacat ticacagaag tgcctgagac gcggagacat ggcctggtgt aatggagct atcaatagc agtgagcgc</p> <p>tcctctagc caccaatgt cctgacaoc ctcacagcc ccacagata acatcagctg aggttttt cagatgaac ctgctctaaa</p> <p>tcaattctc aaagtgtga caaaactaa gaataataat aaacaaaaga aaggigaaa aaaaaaaa aaaaa</p> <p>MWSCSWFNGT XLVEELXACQ DLQLGLSLLS LLGLVVGVPV GLCYNALLVL</p> <p>ANLHKSAMT MPDVVYFVMA VAGLVLSALA PVHLLPPSS RWALWSVGG</p> <p>VHVALQIPFN VSSLVAMYST ALLSLDHYE RALPRTYMAS VYNTRHVCVF</p> <p>VWGGALLTSF SSLFYICSH VSTRALECAK MQNAEAAADAT LVFIFYVYVPA</p> <p>LATLYALVLL SRVRREDTPL DRDTRLEPS AHRLLVATVC TQFGLWTHPY</p> <p>LILLGHTVII SRGKPVDAHY LGLLHFVKDF SKLLAFSSSF VTPLLYRYMIN</p> <p>QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA</p> <p>TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGCGCCG GGAATGTCC</p> <p>CTGAATGCGC GCGGCAGCG GCGACGCGC CCTTGGCGAG CCTGGAGCAA</p> <p>GCCAAACGCA CCGCTTTCC CTCTCTCC GACGTCAA GG GCGACCAACCG</p> <p>GCTGGTCTG CCGCGGTGG AGACAACCGT GCTGGTGCTC ATCTTTGACG</p> <p>TGTCGTGCT GGGCAACGTG TCGGCTGG TGCTGTGGC GCGCGACGA</p> <p>CGCCGGCG CCACTGCTG CCGTGTACTC AACCTCTTCT GCGCGGACCT</p> <p>GCTCTTATC AGCGTATCC CTCTGTGCT GCGCGTGGC TGGACTGAGG</p> <p>CCTCCTGCT GGGCCCGT GCTGCCACC TGCTCTCTA CGTGATGACC</p> <p>CTAGCGGCA GCGTACCAT CCTCAGCTG GCGCGGTCA CCCTGGAGGG</p> <p>CATGGTGRG ATCGRGACC TGGAGCGCG GCGCGGGGT CCTCGCGGC</p> <p>GGCGCGGC AGTGCTGCT GCSCTCATCT GGGCTATTC GCGGTGCGC</p> <p>GCTCTGCTC TGTGCTCTT CTTCGAGTC GTCCCGCAAC GGCTCCCGG</p> <p>CGCCACCAG GAAATTGCA TTTCACACT GATTGGCCC AGCATCTC</p> <p>GAGAGATCT GTGGATGTC TCTTTGTA CTTTGAACCT CTTGGTCCA</p> <p>GGACTGGTCA TTGTATCAG TTACTCCAA ATTTACAGA TCACAAAGG</p> <p>ATCAAGGAAG AGGCTACCG TAAGCTGGC CTACTCGGAG ACCCACCAGA</p> <p>TCCGGTGC CCAGCAGGAC TTCGGCTCT TCCGCAACCT CTCTCTCCTC</p> <p>ATGGTCTCT TCTTCATCAT GTGGAGCCC ATCATCATCA CCATCTCT</p> <p>CATCTGATC CAGAACTTCA AGCAAGACT GGTATCTGG CCGTCCCTCT</p> <p>TCTTCTGGT GGTCCCTTC ACATTGCTA ATTCAGCCCT AACCCCATC</p> <p>CTCTACACA TGACACTGT GAGGAATGAG TGGAAAGAAA TTTTGTCTG</p> <p>CTTCTGTTT CCAGAAAAG GAGCCATTTT AACAGACACA TCTGTCAAAA</p> <p>GAAATGACTT GTCGATTAT TCTGGCTAAT TTTCTTTATA GCCGAGTTT</p> <p>TCACACTGG CGAGCTGTG CATGCTTTA AACAGAGTTC ATTCCAGTA</p> <p>CCCTCCATCA GTGCACCCCTG CTTTAAGAAA ATGAACCTAT GCAAAATAGC</p> <p>ATCCACAGCG TCGGTAAAT AAGGGGTGAT CACCAAGTTT CATAATATT</p> <p>TCCCTTTATA AAAGGATTG TTGGCCAGGT GCAGTGGTTC ATGCTGTAA</p>	A	Homo sapiens

682	194907	G Protein- Coupled Receptor 14273	LR116	P	Homo sapiens
TCCCAGCAGT TTGGGCTGAG GTGGGTGGAT CACCTGAGGT CAGGAGTTGG AGACCAACCT GACCAACATG GTGAGACCCC CGTCTCTACT AAAAATAAAA AAAAAATTA GCTGGGAGTG GTGGTGGGA CCTGTAAATCC TAGCTACTTG GGAGGCTCAA CCACGAGAA CTCTTGAACC TGGGAGGCAG AGGTGCGAGT GAGCCGAGAT CGTGCCATTG CACTCCAACC AGGCAACAA GAGTGAAACT CCATCTTAAA AAAAAAAA AAAGATTGTG TATGGGTTCC TTTTAAATGT GAACTTTTIT AGTGTGTTTG TATATGATCA AATTTAATAA ATATTATIT ATGACTGTTG AGCAAAAAA AAAAAAAA AGGCGCG MSPECARAAG DAPLRSEQA NRTFFFSF VKGDHRLVLA AVETTVLVLI FAVSLGNVC ALVLVARRR RGATACLVLN LFCADLLFIS APLVLAVRW TEAWLLGPA CHLIFYVMTL SGSVTILTA AVSLDRMVCI VMLQRGVRCR GRRARAVLLA LIWGYSAVAA LPLCVFRV V PQRPLGADQE ISICTLIWPT IPGEISWDVS FVTNLN VPG LVIVISYSKI LQTTKASRKR LTVSLAYSRS HQIRVSQQDF RLFRITLLM VSFIMWSP I DITILLILIQ NFKQDLVIWP SLPPWVVAPT FANSALNPIL YNNMTCRNEW KKFCTWFP EKGAULTDTS VKRNDLSIIS G ITYSAIDEL RDKVRFPALL RTTPSADHHV EAMVQLMLHF RNNWIVLVLS SDTYGRDNGQ LLGERVARR ICIAFQETLP TLQPNQNMTS EERQRLVTIV DKLQQSTARV VVVFSPDLTL YHFFNEVL RQ NFTGAVVIAS ESWADPVLH NLTELHGLGT FLGTTIQSVP IGFSEFREW GPQAGPPPLS RTSQSYTCNQ ECDNCLNATL SFNTILRLSG ERVVSYSVA VYAVAHALHS LLGCDKSTCT KRVPYPWQLL EEIWKVNFTL LDHQFFDPQ GDVALHLEIV QWQWDRSQNP FQSVASYPL QRQLKNIKTS LHTVNNITPM SMC SKRCQSG QKKKPVGIVH CCFECIDCLP GTFLNHTCEP NNEWSYQSET SCFKRQL VFL EWHEAPTIAV ALLAALGELS TLAILVFWR HFQTPIVRSA GGP MCFMLLT LLLVAYMVVP VYVGPVKVST CLCRQALFPL CFTICISICIA VRSFQIVCAF KMASRFPRAV SYWVRYQGPY VSMATITVLK MVTIVIGMLA RPQSHPRITDP DDPKITIVSC NPNYRNSLLF NTSLDLLSV VGFSFAYMGK ELPTNYNEAK FITLSMTFYF TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE RNTPAYFNISM IOGYTMRRD atgagcagca attcaatcct gctggggctt gtcagactgt gciacgcgaa cgtgaalggg tccgtgtgtga aaatccctct ctgcocggga tcccggtgtga tictgtacat agtgttggc ttggggctgt gtttgaaac ctctgtgtga tgaattcaat ctctcattic aagcagctgc actctocgac caatttctc gtgtctctc ttggctgcgc tgaattctg gtgggtgtga ctgtgtgccc cttcagcatg gtcaggacgg tgaagactg ctgtattt gggaagagatt ttgtactt ccacaccgc tgtgtgtgtg cattgttia ctctcttc ttactgti gcttctctc catgcacagg tacattgcgg ttactgacct cctgtgtctat cctaccaagt tcaccgtalc tgtgtcagga atgtgtcalca gctgtgtctg gactgtgccc ctatgttaca gctgtgtctgt gttctacaca ggtgtgtatg acgttgggct ggagaattia tctgtatgcc taactgtat aggaagttgt cagaccgttg taatcaaaa ctgggtgtgt acagatttc tatctctt talacciaac ttattatga taattigia ttgttaacata ttcttgttgg cttagagacaca ggcgaataag atagaaata ctgtgtgcaa gacagaatca tcttcagaga gttacaagc cagagtggcg aggaagtaga gaanaagcagc taataacctg eeggtcacag tgttagcatt tatgattica tggtnaccat atagcatga ttcaattt galtcttta tgggctttat aaacctgtcc tgtattatg agatttctgt ttgtgtgtct tatataaact cagccaigaa tctttgatt ttaccatg gtttaggaaa gcaataaag					
683	194908	G Protein-coupled Receptor Gpcrb4	LR117	P	Homo sapiens
ITYSALDEL RDKVRFPALL RTTPSADHHV EAMVQLMLHF RNNWIVLVLS SDTYGRDNGQ LLGERVARR ICIAFQETLP TLQPNQNMTS EERQRLVTIV DKLQQSTARV VVVFSPDLTL YHFFNEVL RQ NFTGAVVIAS ESWADPVLH NLTELHGLGT FLGTTIQSVP IGFSEFREW GPQAGPPPLS RTSQSYTCNQ ECDNCLNATL SFNTILRLSG ERVVSYSVA VYAVAHALHS LLGCDKSTCT KRVPYPWQLL EEIWKVNFTL LDHQFFDPQ GDVALHLEIV QWQWDRSQNP FQSVASYPL QRQLKNIKTS LHTVNNITPM SMC SKRCQSG QKKKPVGIVH CCFECIDCLP GTFLNHTCEP NNEWSYQSET SCFKRQL VFL EWHEAPTIAV ALLAALGELS TLAILVFWR HFQTPIVRSA GGP MCFMLLT LLLVAYMVVP VYVGPVKVST CLCRQALFPL CFTICISICIA VRSFQIVCAF KMASRFPRAV SYWVRYQGPY VSMATITVLK MVTIVIGMLA RPQSHPRITDP DDPKITIVSC NPNYRNSLLF NTSLDLLSV VGFSFAYMGK ELPTNYNEAK FITLSMTFYF TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE RNTPAYFNISM IOGYTMRRD					
684	194957	Trace Amine Receptor 4 (TA4)	AF380192	A	Homo sapiens
atgagcagca attcaatcct gctggggctt gtcagactgt gciacgcgaa cgtgaalggg tccgtgtgtga aaatccctct ctgcocggga tcccggtgtga tictgtacat agtgttggc ttggggctgt gtttgaaac ctctgtgtga tgaattcaat ctctcattic aagcagctgc actctocgac caatttctc gtgtctctc ttggctgcgc tgaattctg gtgggtgtga ctgtgtgccc cttcagcatg gtcaggacgg tgaagactg ctgtattt gggaagagatt ttgtactt ccacaccgc tgtgtgtgtg cattgttia ctctcttc ttactgti gcttctctc catgcacagg tacattgcgg ttactgacct cctgtgtctat cctaccaagt tcaccgtalc tgtgtcagga atgtgtcalca gctgtgtctg gactgtgccc ctatgttaca gctgtgtctgt gttctacaca ggtgtgtatg acgttgggct ggagaattia tctgtatgcc taactgtat aggaagttgt cagaccgttg taatcaaaa ctgggtgtgt acagatttc tatctctt talacciaac ttattatga taattigia ttgttaacata ttcttgttgg cttagagacaca ggcgaataag atagaaata ctgtgtgcaa gacagaatca tcttcagaga gttacaagc cagagtggcg aggaagtaga gaanaagcagc taataacctg eeggtcacag tgttagcatt tatgattica tggtnaccat atagcatga ttcaattt galtcttta tgggctttat aaacctgtcc tgtattatg agatttctgt ttgtgtgtct tatataaact cagccaigaa tctttgatt ttaccatg gtttaggaaa gcaataaag					

685	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	<p>ttatgttaac tggcagaggt ttaagaaca gttcagcaac catgaattg ttctctgaac atataaa MSSNSLLVA VOLCYANVNG SCVKIPFSPG SRVILYTVFG FGAVLAVFGN LLVMISILHF QQLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWFYF GRSFCFTHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PKFTVSVSG ICISVSWILP LMYSGAVFYT GYDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT FIMILYQNI FLVARROAKK IENTGSKTES SSESYPKARVA RERKAAKTL GVTVAFMIS WLPYIDSLL DAFMGFTPA CIYEICCWCA YNNSAMNPLI YALFYPWFRK AIKVITVGQV LKNSSATMNL FSEHI</p>	P	Homo sapiens
686	194958	Trace Amine Receptor 5 (TA5)	AF380193	<p>atgacagca aatttccca accgtgtgt cagtttgt atgaagatgt gaattgaat ctccatc tcttgagct cgggaatc tgcacagc gttatgtt gggcttgt tggcttgt ttgaaatc ttgaaatc ctctgtct tcatitaa cagctgcaat ctcaacaa ttctcat ggcctctgg cctgtctga ctctgtga ggtgtgac gttatgtt cagcaggt aggacgggtg agagctgtg gtaattgga gccaaatt gtaattc cagttgtgt gttgtgcat ttgtatc ttctgtc cactgtgt tcatgtcat cgaagagac atgtgtgt ctaacccct ggtctatgt accaagttc cgtgtgtgt gtcgggaat tgcacagc gttctgtgt tctgtgtc acgtacagc gttgtgtgt ctacacaggt gttcaatgt atgggtgtgga ggaattgta aggtgtctca actgtgtgag tggctgtgaa atattgaa gttcaagctg ggtgtgaa gatttgtt taitctat acctacccgt gttatgaa ttctttag ttatgttt ctatagca aacacagc taaataat gaaactata gttgcaagt agaaatc tcaagagt ataaatcag agtgccaa agagagagga agcagctaa aacctgtgg gttcaggtac tagcattgt taitcag ttaccgata cagttgat ataatgt gctttatg gcttctgac cctgtctat alctatgaa ttgtgtgt ggtgtgtat taaatcag ccaatcag ttgtatgt gctatgt tctgtgt ttggaagcc ataaacta tttaagtg agattgt aaggtgtt caaacat tagttat ttgaaat</p>	A	Homo sapiens
687	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	<p>MTSNFSQPVV QLCHEVDVNGS CIETPSPGS RVILYTAFSF GSLLAVFGNL LVMTSVLHFK QLHSPTNFL ASLACADFL VGVTVMLFSMV RTVESCWFYF AKFCTLHSCC DVAFCYSSVL HLCFICIDRY IVVTDPLVYA TKFTVSVSGI CISVSWILPL TYSGAVFYTG VNDGGLLELV SALNCVGGCQ IIVSQGWVLI DFLFFIPTL VMILYSKIF LIAKQQAUKI ETTSSKVESS SESYKIRVAK RERKAATLG VTVLAFVSW LPYTVDLID AFMGFLTPAY IYEICCWSA YNNSAMNPLY ALFYPWFRKA IKLILSGDVL KASSTISLF LE</p>	P	Homo sapiens
688	194959	MrgX4 G Protein-Coupled Receptor	AY042216	<p>tgcaltgtct tcttctgt ccatgaga cagttctag tcaagaggt gttcaacaa cctctgtgt taitgaat cctcaactg aaagaaat tcaagccag gttatgataa tcaaggtc caagccctg gctgagagag tgggtgtgt ttatctaa tgtattcc atgtcagcac agaaactgt tggcagaga gaaatgtcag gttcagag caacagagac tggattcaa acttgattg aggaacccca cctgtgtgaa gttatgt atctgtgag cttgtgtt ctctctta aaagagaga gtaaatocaa taccgaggg tgggtgggag aatcagaga gttacagctg gttatcact ttgtgtgt ttccaggggg caccagacia gatttgtga gcaatgac aacctccca gttctgtga caaacagac accaatcaac gttcagagag agactctgt ctaacatcag acctgtgct tcaaggtgt gacgtgtc alttccctg tggagagag aggaacagc gttgtgtct ggctctggg ctaccagc cgaagagc ctgtctcat ctacatct aacctggcc cagcaagact cctctctc agttccaga ttatagtc gttatagc ctatcaala tcaagccatc calccgcaaa atctgtgt cttgtgtgac ctltccac tttaagccc ttgattgt gttgagc agcaagagc gttctgtgt tttctgtgt cctgtgtgt accgtgtgt ccgcccaca cactgtcag cgtgtgtgt tttctgtgt cgtgtgtgt cgtgtgtgt ttgtgtgt gttgtgtgt cctgtgtgt gttgtgtgt ctatgtgtgt tttaagctga gttatcc cagttgtgt ttgtgtgt ttctgtgt ttcagagc gttctgtgt tcaagatct cttgtgtgt cgtgtgtgt cgtgtgtgt cgtgtgtgt accatctgt</p>	A	Homo sapiens

689	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	<p>tcacagtgct ggctctctc ctctcgggcc tgcctctcg cttcttgagg gccctaatl acagagtgca cctgaattg gaagtcttat attgcatgt ttaictggtt tgcattgccc tgcctctct aaacagtagt gccaaoccca tcaattact ctg-tggggc tcttiaggc agcgtcaaaa tagcagaagac ctgaagcttg ttctccagag ggctctgag gacaaagcctg aggtggataa aggtgaaggg cagctctcig aggaagagctt ggagctgicg ggaagcagat tggggcagtg agggagagcc tctgcccgt cagtcagacg ggacttgag agcaacactg tctggcaac ctggcaat acatgggt tcttagtgt ttgcctcag aaatgctca gtagtaac aaggtctca aataaagt taictaact gacagtgca gttttacc aggaagca ttactgac agtacaaigt tgg MDTPVPVFGT KLTPINGREE TPCYNQJLSF TVLTCHLSLV GLTGNAAVVLW LLGYRMRRA VSYILNLAA ADFLFSQI IRSPRLNI SHLRKILVS VMTFPYFTGL SMLSASTER CLSVLWPIWY RCRPPTHLVA VVCVLLWGLS LLFSMLEWRF CDFLFSGADS SWCETSDFP VAWJFLCVV LCVSSLVLLV RILCGSRKMP LTRLVYTILL TVLVFLCGL PFGILGALYI RMHLNLEVY CHVYLVCMSL SSLSSANPI IYFFVGSFRQ QNRQNKLKLV LQRALQDKPE VDKGEGQLPE ESLELSGSRL GP</p>	P	Homo sapiens
690	195015	G Protein- Coupled Receptor GPR82	AF411111	<p>atgaacaaca atacaacatg taictaaca tctatgact ctccaatgg ttacaacac attacalcc tecttgat tgttggtgt tttggaaaca ctctctctca ategatatt ttacaanaa taggtanaaa aacatcaacg cacatctacc tgtcacacct tggactgca aacttacttg tggcagtgcc calgcttctc atgagatct attcttgaa aggtttccaa tgggaataac aatcigtcca atgcagagtg gtcaatttic tgggaactct atccatgcat gcaagatagt tigtcatgct cttaatttia agttggatg ccazaagccg ctatgctacc ttaaigcaaa aggatctctc gcaagagact acttcatgt atgaagaaat attttatgc catttactg aaaaatttc ccagcccaac tttctgaaa aactatgcat ttacatag ggagttgac tgggcataat catccagtt accgtatact acitcagatc agaggctaca gaaggagaag agagocctatg ctacaatcgg cagatggzac tagggagccat gatctctcag atggcagtc tcatgggac cacatttat ggaatttct ttttagt actaatca tactacttt ttgaagcca tctgagaaa ataaagacct gtaagctcat talggagaaa gatttgact acagtictg gaanaagacat cttttgca tccagattt actaaagtt tgcctcttc ctatagat tttzaaacc atttttat ttctacaca aagagaacac tgtcagcaat tgaatttat aatagaaca aaaaacatc tcaactgtct tgcctggcc agagtagca cagaccccat tatatttct ttatagaca aacatitcaa gaagacata tatactct ttacaagtc taatcagca calatgcaat calatgggtg a</p>	A	Homo sapiens
691	195015	G Protein- Coupled Receptor GPR82	AAL26482	<p>MNNNTTCIQP SMISSMALPI IYLLLCIVGV FGNTLSQWIF LTKIGKKTST HIYLSHLVTA NLLVCSAMPF MSYFLKGFQ WEYQSAQCRV VNFLGTLSMH ASMFVSLIL SWIAISRYAT LMQKDSQET TSCYEKIFYG HLLKKFRQPN FARKLCYIW GVVGLIIPV TVVYSVIEAT EGEESLCYNR QMELGAMISQ IAGLIGTTFI GFSFLVVLTS YVSFVSHLRK IRCTCSIMEK DLTYSSVKRH LLVQILLV CFLPYSIFKP IFYVLHQRDN CQQLNYLIET KNILTCLASA RSSTDPIFL LLDKTFKKTL YNLFTKSNSA HMQSYG</p>	P	Homo sapiens

SEQ ID	LSID	Gene	Source ID	Sequence	Code	Species
NO: 1	127	5-HT1A Receptor	NM_000524	atggaatgtgc tcagccctgg tcagggaac aacaccacat caccaccggc tccctttgag accggcgga acactactgg tatctccgac gtgacctga gtaaccaagt gatacctct ctgtgtctgg gcaactcat ctcttcgag gtctgggga atgctgcgt ggtggctgcc atcgccctgg agcgtccct gcagaactg gccaattatc ttattggctc ttggcggtc accgacctca tgggtcggt gtgtgtgtg cccatggccg cctgtatca ggtgctcaac aagtggacac tgggacaggt aactcggac cctgttcact cctcgact gctgtgctgc acctatcca tcttgacct gtgcgcac gcgtggaca ggtactggc catcacggac cccactgact acgtgaaca gaggaagccc cggccgctg cgtcatctc gctcacttg cttatggct tctcatctc tatecgccc atctgggct ggccacccc ggaagaccgc tcggacccc acgatgcac cattagcaag gatcatggt acatatcta ttccacttt ggagctttct acatccgct gctgctcatg ctggtctct atggcgcat atccgagct gcgcttcc gcacgcga gaggtcaaa aaggtgaga agaccggagc ggacaccgc catggagcat ctccgccc gcagccaa aagagtgtga atggagagc gggagcagg aactggaggc tggcggtga gagcaaggct ggggtgctc tgtgcgcaa tggcgcggtg aggcaaggtg acgatggcg cgcctggag gtatcgagg tgcaccgagt ggcaactcc aaagagcact tgcctctgcc cagcaggtct ggtctaccc ctgtgccc cgcctcttc gagaggaaa atgagcgca cgcgaggcg aagcgaaga tggccctggc ccgagagagg aagacagtga agacgtggg catcatcatg ggcacttca tctctgtcg gctgcccttc ttcatgtgg ctctgttct gccctctgc gagagagct gccacatgcc caccctgtg ggcgccataa tcaattggct gggctactcc aactctctg ttaaccccg catttacgca tacttcaaca aggacttca aaacgcgtt aagaagatca ttaagtgtaa ctctgccgc cagtga	A	Homo sapiens
2	127	5-HT1A Receptor	NP_000515.1	MDVLSPGQN NTTSPAPFE TGGNTTGISD VTVSQVITS LLLGLIFCA VLGNACVAA IALERSIQNV ANYLIGSLAV TDLMSVIVL PMAALYQVIL KWTLGQVTC LFIALDVLCC TSSILHLCAL ALDRYWAITD PIDYVNRTP RPRALISLTW LIGFLISIPP ILGWRTPEDR SDPDATISK DHGYTIYSTF GAFYIPLLM LVLYGRIFRA ARFRIRKTVK KVEYTGADTR HGASAPQPK KSVNGESGR NWRLGVESKA GGALCANGAV RQDDGGALE VIEVHRVGN KEHLPLPSEA GPTPCAPASF ERKNERNAEA KRMALARER KTVKTIGIIM GTFILCWLPE FIVALVLPFC ESSCHMPTLL GAIINWLGYS NSLLNPVIYA YFNKDFQNAF KKIKNFCR Q	P	Homo sapiens
3	128	5-HT1B Receptor	NM_000863	atggaggaa cgggtgctca gtgcgtcca ccgcgcgccg cgggctccga gacctgggtt cctcaagcca acttatctc tgcctctcc caaaactgca gcgcaagga ctacattac caggactcca tctccctacc ctggaaagta ctgctggta tgcattggc gctcatcac ttggccacca cgctctcaa tgcctttgtg attgccacag tgcacggag ccggaactg cacacccgg ctaactacct gatgcctct ctggcggtca ccgacctgt tgttccatc ctgggtgatgc ccatcagcac catgtacact gtccacggc gtcggacact gggccagggtg gtctgtgact tctgtgtgc tgcggacatc actgtgtgca ctgctccat cctgcacctc tgtgtcatcg cctggaccg ctactggcc atcacggac ccgtgagta ctacgctaaa aggactcca agaggcggc ggtcatgate gcgtgtgtgt ggtctctct catctctatc	A	Homo sapiens

Homo
sapiens

P

tcgtgccc cttcttctg ggtcaggct aagccgaag aggaggtgtc ggaatgctg
 gtgaacacg accacatct ctacacgtc tactccacg tgggtgctt tacttcccc
 acctgctcc tcacgccc ctatggcgc atctacgtag aagccgctc ccgattttg
 aaacagacg ccaacaggac cggaagcgc ttgacccgag cccagctgat aaccgactc
 cccgggtcca cgtctcgtt cactctatt aactcgcgg ttcccgacgt gccagcgaa
 tccggtatct ctgtgtatgt gaaccaagtc aaagtgcgag tctcgcagc cctgctggaa
 aagaagaac tcattggcgc tagggagcgc aaagccacca agaccctag gatcatttg
 ggagcctta ttgtgtgtg gctacccttc ttatcattct cctagttag gctatctgc
 aaagatgct gctggttcca cctagccatc ttgacttct tcacatggct gggctatctc
 aactccctca tcaaccccat aatctatacc atgtccaatg aggactttaa acaagcattc
 cataaactga tacgttttaa gtgcacaagt tga

NP_000854.1

5-HT1B
Receptor

128

4

Homo
sapiens

A

agccaaatgt gtggaggtct gtgggaagag agagccacct agcatgtccc cactgaacca
 gtacagcaga ggccttcccc aggaagcctc caacagatcc ctgaatgcca cagaacacct
 agaggtttg gatccagga cctccaggc gctcaagtc tcccttgccg tggctcttc
 cgtcatcaca ctggccacag tccctccaa tccctttgta ctaccacca tcttactcac
 caggaagctc cacacccctg ccaactacct gattggctcc ctggccacca cgcacctctt
 ggtttccatc ttggtaatgc ccatcagcat cgcctatacc ataccacca cctggaaact
 tggccaaatc ttgtgtgaca tctggctgtc ctctgacatc acgtgctgca cagctccat
 cctgcatctc ttgtgtcattg ctctggacag gtactgggca atcacagatg ccttggaaat
 cagtaaacgc aggaagcgtg gccacgcgc caccatgac gccattgtct gggccatctc
 catctgcac tccatccccc cgtctcttg gcgagaggcc aagggccagg aggaatgtc
 ggactgtctg gtgaacacct ctacagatctc ctacaccatc tactccacct gtgggacct
 ctacattccc tgggtgttg tcatcatct ataggccgg atctaccggg ctgcccggaa
 cgcacatctg aatccacct cactctatg gaaagcctt accatggccc acctatcac
 aggctctgcc ggtctctgc tctgtctgct caactccagc ctccatgagg ggcactcgca
 ctggtgtggc tccctctct ttttcaacca cgtgaaatc aagctgtctg acagtgcct
 ggaacgcaag aggtattctg ctgtctgaga aaggaagcc actaaatcc tgggcatcat
 tctggggcc ttatcatct gctggtgccc cttctctgtg gtgtctctgg tctccccat
 ctgcccggac tctgtctgga tccacccgc gctctttgac ttctccacct ggttaggcta
 tttaaactcc ctcatcaatc caataatcta cactgtgtt aatgaagat ttcggcaagc
 ttttcagaaa attgtccct tccggaagcc ctcctagtct tattcgatga ggtaaagaaa

NM_000864

5-HT1D
Receptor

129

5

Homo
sapiens

P

msplnqsaeg lpqeaenrsl natetseawd prtioalkis lavlsvitl atvltnafvl
 ttilltrklh tpnyligsl attdlvsl vmpisayti thwmfqqil cdiwlssdit
 cctasilhlc vialdrywai tdaleyskrr taghaatmia iwaaisicis ipplfwrqak

NP_000855.1

5-HT1D
Receptor

129

6

7	130	5-HT1E Receptor	NM_000865	<p> AQEEMSDCLV NTSQISYTIY STCGAFYIPS VLLIILYGR YRAARNRIILN PPSLYGKRFT TAHLITGSAG SSLCSLNSSL HEGHSHSAGS PLFFNHVKIK LADSALERKR ISAAERKAT KILGIILGAF IICWLPEFFV SLVLPICRDS CWIHPALFDF FTWLGYLNSL INPIIYTVFN EEFRQAFQKI VPFRKAS atcgaatgtt gagagaagca gtgctctgat ccagctcagg agaaaaagga gcgggttccg A agtgagactt ctggagccag ctggagctgc cggtttgccc agtgcggcgc ggctgcacgc accgtccaca agagtctcag tcgccaggc tggagtgca cagcagctc tcacctcatt gcaacctcgc cctccgggt tcgcgggttc tccgcctcag ctctcagta gctgggattg caggcaactca ccacatgcc cggctaattt ttgtaatatt tagtgagac gggatttcac catgttgccc atgtgtgtct tgaaccccc accctggatg attgcggcgc ctggcctcc caaagtgtg gaattacagg cgaaccttca ctgaagaa atgtgtggc ccttccctt accaagaaa aatggaacac agagaccac atagtgaac aaattatag ctcctacaa gtgagaaacc ttcgaggcta catagtttc agccaaagga aaataaccaa cagcttctcc acagtgtaga ctgaacaag ggaacatga acatacaaa ctgtaccaca gaggccagca tggctataag accaagacc atcaactaga agatgtcat ttgcatgact ctggtgggtca tcaccacct caccagttg ctgaacttg cgtgatcat ggctattggc accacaaga agctccacca gctgccaac tacctaact gtctctggc cgtgacggac ctctgggtg cagtgtcgt catgccccg agcatcatct acattgtcat ggatcgtg aagcttgggt acttctctg tgaggtgtg ctgagtggtg acatgacctg ctgcacctg tccatctcc acctctgtg cattgcccg gacagtgact gggccatcac caatgtatt gaatgcgca ggaagaggac ggccaagagg gccgcgtga tgatcctac cgtctggacc atctccatt tcatctccat gccccctcg ttctggagaa gccacggcg cctaaagccct cccctagtc agtgcacct ccagcacgac catgttatct acacattta ctccagctg ggtggtttt atatccctt gactttgata ctgattctct attaccgat ttaccacgc gccaaagacc ttaccagaa aaggggatca agtcggcact taagcaacag aagcacagat agccagaatt ctttgcgaag ttgtaaaact acacagact ttctgtgtgc tgacttctcc acctcagacc ctaccacaga gttgaaaaag ttccatgctt ccatcaggat ccccccttc gacatgac tagatcacc aggagaacgt cagcagatct ctgacaccag ggaacggaag gcagcacgca tcttggggt gattctgggt gcattcattt tatcctgggt gccatttttc atcaaagat tgatttgagg totgagatc tacacctgt cctcggaagt ggcgacttt ctgacgtggc tcggttatgt gaattctctg atcaacctc tgctctatac gagttaataa gaagacttta agctggcttt taaaaagctc attagatgc gagagcatac tttagctgta aaagctaaa aggcacgact tttccagag cctcatgagt ggaagggggt aagggtgca acttattaat tcttgaacat acttggttca ggagagttg taagtattg tggctctgtt tcttgtttg ttgtttgtt ttgttctgt ttgttgagg attgtattt ggcgtgctgt tttctacctc tggctctatc tgtgatacat aatttcaat aaacattatc atacaaaaa aaaaaaaa aaaaaaaaaa </p>	Homo sapiens
8	130	5-HT1E Receptor	NP_000856.1	<p> NMNITCTTEA SMAIRPRTIT ERMICMTLV VITTLTLLN LAVIMAIGTT KKLHQPNYL P ICSLAVTDLL VAVLVMPISI IYVMDRWKL GYFCEVWLS VDMTCCTCSI LHLCVIALDR YWALTNALEY ARKRTAKRAA LMLTWTIS IFISMPPLFW RSHRRLLPPP SQCTIQHDHV IYTIYSTLGA FYIPLTLILI LYRIYHAAK SLYQKRSSR HLSNRSTDQS NSFASCKLTQ </p>	Homo sapiens

9	131	5-HT1F Receptor	NM_000866	<p>TFCVSDFTS DPTTEFEKH ASIRIPFDN DLDPGEROQ ISSTRERKAA RIILGILGAF ILSWLPFFIK ELIVGLSIYT VSSEVADFLT WLVYNSLIN PLYTSFNEF FKLAFFKLIR CREHT</p> <p>atggatttct taaattcatc tgatcaaac ttgaacctcag aggaactgtt aaacagaatg A ccatccaaaa ttctgggtgc cctcaactctg tctgggctgg cactgatgac acaactatc aactcccttg tgatcgctgc aattatttg acccggaagc tgcaccatcc agccaattat ttaatttggt ccttgctcgt cacagatttt cttgtggctg tctgtgtgat gcccttcagc attgtgtata ttgtgagaga gagctggatt atggggcaag tggctgtgga cattggctg aggtttgaca ttactgtcg cactgtctcc atctgtcatc tctcagctat agctttggat cggtatcgag caatcacaga tgcgtgtgag tatgccaga aaaggactcc aaagcatgct ggcattatga ttacaatagt ttgattata tctgttttta tctctatgcc tctctattc tggaggcacc aaggaaactag cagagatgat gaatgcatca tcaagcacga ccacattgtt tccaccattt actcaacatt tggagctttc tacatccac tggcattgat ttgatcctt tactacaaaa tatatagagc agcaagaca ttataccaca agagacaagc agtaggatt gcaaaggagg aggtgaatgg ccaagtcctt ttgagagtg gtgagaaaa cactaaaaa gtttccacat cctatgtact agaaagtct ttatctgacc catcaacaga ctttgataaa attcatagca cagtgaagaag tctcaggtct gaattcaagc atgagaaatc ttggagaagg caaaagatct caggtacaag agaacggaaa gcagccacta cctctgggatt aatcttgggt gcatttgtaa tatgttgggt tctttttttt gtaaaagaat tagttgttaa tgtctgtgac aaatgtaaaa ttctggaaga aatgtccaat ttttggcat ggttgggta tctcaattcc cttaaaatc cactgatita caaatctttt aatgaagact tcaagaaagc attccaaaag cttggcgtat gtcgatgta g</p>	Homo sapiens
10	131	5-HT1F Receptor	NP_000857.1	<p>MDFLNSSDQN LTSEELNRM PSKILVSLTL SGLAMTTTI NSLIVAAIIV TRKLHPANY P LICSLAVTDF LVAVIWPFS IVYIVRESWI MGQVVDIWL SVDITCCTCS ILHLSAIALD RYRAITDAVE YARKRTPKHA GIMITIVWII SVFISMPPLF WRHQTSRDD ECIHKHDHIV STIYSTFGAF YIPLALILIL YKYIYRAKT LYHKRQASRI AKEEVNGQVL LESGEKSTKS VSTSYVLEKS LSDPSTDfDK IHSTVRSLSR EFKHEKSWRR QKISGTREK AATTGLLILG AFVICWLPFF VKELVVNVCD KCKISEMSN FLAWLGYLNS LINPLIYTF NEDFKKAFQK IVRCRC</p>	Homo sapiens
11	132	5-HT2A Receptor	NM_000621	<p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataacc tgttagtctt tctacacctc atctgtaca agttctgggt tagacatgga tattctttgt gaagaaaaa cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc aggcctaca gtaatgactt taactctgga gaagctaaca ctctctatgc atttaactgg acagtgcact ctgaaaatcg aaccacctt tccgtgaaag ggtgcctctc accgtcgtgt cctccttac ttcactcca ggaaaaaaac tggctgctt tactgacagc cgtagtgtatt attctaacta ttgctggaaa catactctgc atcatggcag tgtccctaga gaaaagctg cagaatgcca ccaactattt cctgatgtca cttgcatag ctgatatgct gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accgtggcc tctgcgagc aagctttgtg cagctggat ttacctggac gtgctcttct ccacggcctc catcatgcac ctctgcgcca tctcgtgga ccgctacgtc gccatccaga atcccatcca ccacagccgc ttaactcca gaactaaggc</p>	Homo sapiens

12	NP_000612.1	5-HT2A Receptor	<p> atttctgaaa atcattgtctg ttggaccat atcagtaggt ataccatgc caataccagt ctttgggcta caggacgatt cgaaggtctt taagtagggg agttgcttac tcgccgatga taactttgtc ctgatcggtt cttttgtgc attttcatt cccttaacca tcatgggtgat cacctacttt ctaactatca agtcactcca gaaagaagt cttttgtg taagtgtatc tgccacacgg gccaaattag cttttttcag cttctccct cagagttctt tgtcttcaga aaagctcttc cagcgttcca tccataggga gccagggtcc tacacaggca ggaggactat gcagtccatc agcaatgagc aaaggcatg caagtgctg ggcctcgtct tctctcgtt tgtgtgatg tggtgcccct tcttcacac aacatcatg gccctcatct gcaaagagtc ctgcaatgag gatgtcattg gggccctgct caatgtgttt gtttggatcg gttatctctc ttcagcagtc aaccactag tctacacact gttcaacaag acctataggt cagccttttc acggtatatt cagtgctcagt acaaggaaaa caaaaaacca ttgcagttaa ttttagtgaa cacaataccg gctttggcct caagctctag ccaacttcaa atgggacaaa aaagaattc aaagcaagat gccagacaaa cagataatga ctgctcaatg ttgctctag gaaagcagca ttctgaagag gcttctaaag acaatagcga cggagtgaat gaaagggtga gctgtgtgtg ataggctagt tgcctggca actgtggaag gcacactgag caagtttca cctatctgga aaaaaaaat atgagattgg aaaaattag acaagctcag tggaaccaac gatcatatct gtatgctcca ttttattctg tcaatgaaaa gcggggttca atgtacaaa atgtgtgctt ggaaatgtt ctgacagcat ttacgtctg agctttctga tacttattta taacattgta aatgatattg ctttaaatg attcactttt attgtataat tatgaagccc taagtaaatc taaattaaat tctatttca agtgaaaaac ttgctgctat gctgttccat gatgacatgg gattgagttg gttactatt gccgtaaaa aaaaacttact atggtatatata tttgaaaag gaatataatg gcctcttaa aattatctt aaaaacttact atggtatatata tttgaaaag agaaaaaaa aaagccacta aggtcagttg tataaaatct gttgtgctaa gataatataa tgaaatactt gacaacattt ttcatagata ccattttgaa atattcaciaa ggttgcctggc atttgcctga tttcaagtta attctcagaa gtgaaaaaga cttcaaatgt tattcaataa ctattgtgc tttctcttct acttctgtg cttactcttg aattccaggt gtggtcttgt ttaatatltg ttctcttagg taaactagca aaagatgat ttaacattac caatgcctt tctagcaatt gcttctctaa aacagcacta tcgaggtatt tggtaacttg ctgtgaaatg actgcatcat gcatgcactc ttttgagcag taaatgtata ttgatgtaac tgtgtcagga ttgagatga actcaggttt ccggtactg acagtggtag agtcctagga catctctgta aaaaagcaggt gactttccta tgacactcat caggtaaaact gatgtttica gatccatcgg tttatactat ttattaaaac cattctgctt ggttccacaa tcatctattg agttacatt tatgtgtgaa gcaaatctct agatatgaga aatataaaaa taattaaaaa aaatcctttg ccttcaaacg aaatggctcg gccaggcagc gaggtcctg catgtaatcc tagcactttg ggaggtgag atgggaggt cacttgaggc caagagtttg agaccaacct gggtaacaaa gtgagacctc cctgtctcta caaaaaaat caaaaaatta tctgatcctt gtggcacaca actgtgttcc cagctacagg ggaggtgag acgcaaggat cacttgagcc cagaagctca aggctcaggt gagccaagt cacaccactg ccatttctc ctgggcaaca gagtgaagcc ctatcacccc gaattc </p>	Homo sapiens
132	NP_000612.1	5-HT2A Receptor	<p> LSPCLSLH LQEKNSALL TAWIILTIA GNILTVMAVS LEKQLQATN YFLMSLAIA </p>	

13	133	5-HT2B Receptor	NM_000867	<p>MLGLFMPV SMLTILGYR WPLPSKLCV WIYLDVLFST ASIMHLCAIS LDRYVAIQNP IHHSRNSRT KAFKLIIAW TISVIGSMPI PVFGLQDDSK VFREGSCLLA DDNFVLIGSF VSFFIPLTIM VITYFLTIKS LQKEATLCVS DLGTRAKLAS FSFLPQSSLS SEKLFQSRSH REPGSYTGRR TMOQISNEQK ACKVLGIVFF LFVVMWCPFF ITNIMAVICK ESCNEDVIGA LLNVFWIGY LSSAVNPLVY TLFNKTYRSA FSRYIQCYK ENKKPLQLIL VNTIPALAYK SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEASKDN SDGVNERKVC V</p> <p>tactaaccat gctgaccact gttcggaacg ggaatgaact acagaaaaac agcaaatggc A tctctcttac agagtgtctg aacttcaaaag caaatctctt gacgacatctt tgcagagcac ctttgttcac gttatctctt ctaactggtc tggattacag acagaatcaa taccagagga aatgaacacag attgttgagg aacagggaat taactgcac tggcagctc tctgatact catggtgata ataccacaaa ttggtggaaa taccctgtt attctggctg tttcactgga gaagaagctg cagtatgcta ctaattactt tctaattgctc ttggcgggtgg ctgatttgc ggttgattg ttgtgatgc caattgacct ctgtcgtggt attcttgac gttctcttt caaccgcatc cctccactt gttctgatgc ctgctggtt attcttgac gttctcttt caaccgcatc catcatgcat ctctgtgcca ttctcagtga tcgttacata gccatcaaaa agccaatcca ggccaatcaa tataactcac gggtcacagc attcatcaag attacagtgg tgtggttaat ttcaataggc attgcatcct cagtcctctat taagggata gagactgatg tggacaaccc aaacaatc acttgtgtgc tgacaaagga acgttttggc gatttcattgc tcttggctc actggtgctc ttcttcacac ctcttgcaat tatgattgtc acctactttc tcaatcca tgctttacag aagaaggctt acttagtcaa aaacaagcca cctcaacgcc taacatggtt gactgtgctc acagtttcc aaaggatga aacacttgc tcgtcacggg aaaaggtggc aatgctggat ggttctcga aggacaaggc tctgccaac tcagtgatg aaacattat gcgaagaaca tcccaattg ggaataagtc agtgagacc atttccaaac aacagagagc ctcaaaagtc ctaggattg tgttttctc ttttctctt atgtgtgtc cttctttat tacaataata actttagtt tatgtgttc ctgtaccaa actactctc aaatgctcct ggagatattt gtgtggatag gctatgttc ctgagagtgc aatccttgg tctacacct cttcaataag acatttcggg atgcatttg ccgatatatc acctgcaat accggggccac aaagtcaaga aaaaactcga gaaacgctc cagtaagatc tacttcgga atccaatggc agagaactct aagtttttca agaactatgg aattcgaaat gggattaaac ctgccatga ccagagtcca atgaggtcc gaagtcaac cattcagctc tcatcaatca tttactaga tacgctctc ctcaactgaa atgaagtga caaaactgaa gagcaagta gttatgtata gcagaactgg cagttgtcat caacataat gatgagtaag atgagaaat agatgaaat gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tcttaacct aagatgtaag tattaagaat atctaattt cctaatttgg acaagattat tccatgagga aaataattt atatagctac aaatgaaaac aatccagcac tctggttaa ttttaaggta ttcgaatgaa ataaagtcaa atcaataaat ttcaggcttt aaaaaaaa</p>	Homo sapiens
14	133	5-HT2B Receptor	NP_000858.1	<p>MALSYRVSEL QSTIPEHIQ STFVHVISSN WSGLOTESIP EEMQIVEEQ GNKLHWAALL P ILMVIPTIG GNTLVTLAVS LEKKLVATN YFLMSLAVD LLVGLFVMP I ALLTIMFEAM WPLPLVLCPA WFLDVLVST ASIMHLCAIS VDRYIAIKKP IQANQVNSRA TAFIKITVW LISIGIAPV PIKGIETDND NPNNTICVLT KERFGDFMLF GSIAAFFTPL AIMIVTYFLT THALQKKAYL VKNKPQRLT WLTSTVTFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens

15	134	5-HT2C Receptor	nm_000868	<p>LMRRSTIGK KSVQISNEQ RASKVLGIVF FLFLMWCFF FITNITLVC DSCNQTTLQM LLEIFWIGY VSSGVNPLVY TLFNKTRDA FGRIYTCNVR ATKSVKTLRK RSSKIYFRNP MAENSKFFKK HGIIRGINPA MYQSPMLRS STIQSSSIIL LDILLTENE GDRTEEQVSY V</p> <p>accgcgcga ggtaggcgt ctggtgcttg cggaggacgc ttcttcctc agatgcacgc A atcttcccg tactgcctt ggagggcta gattgctagc cttgctgct ccatggcct sapiens gccttgccc ttactgccg attgcatacg aactcttct tctctgtac atcgttgtcg tcggagtcgt cgcgacgct gtcgcgctcg tgtgatggcc ttgctcgtt tagagtagtg tagttagtta gggcccaacg aagaagaaag aagacgcgat tagtcagag atgctggagg tggtcagtta ctaagctaga gtaagatagc ggagcgaata gagcaaac tagccggggg gcgcacggtc acccaaaagg ggtcgactcg ccggcgcttc ctatcgcc gagtccctc cattctctc cctccgcga ggcgcgagt tgcggcgcgc agcgcagcgc agtcacgcgc accgactgcc gcgggctccg ctgggcgatt gcagccgagt ccgttctcg tctagctgcc gccggcgga ccgctgcctg gttctctcc cggacgctag tgggttatca gctaacccc gcgagcatct ataacatagg ccaactgac ccactctca aaacaaacta aaggatgata tgatgaacct agcctgttaa ttctgcttc tcaatttaa actttgggtg ctaagactg aagcaatcat ggtgaacctg aggaatgcgg tgcattcatt cctgtgacac ctaattggcc tattggttg gcaatgtgat attctgtga gccagtagc agctatagta actgacattt tcaatacctc cgatggtgga cgcttcaaat tccagacgg ggtaacaaac tggccagcac tttcaatcgt catcataata atcatgacaa tagtgggcaa catccttgt atcatggcag taagcatgga aaagaactg cacaatgcca ccaattactt cttaatgtcc ctgcccattg ctgatatgct agtgggacta ctgtcatgc cctgtctct cctggcaatc ctttatgatt atgtctggcc actacataga tatttggcc ccgtctggat tctttagat gttttatttt caacagctc catcatgcac ctctgccta tctcgtgga tcggtatgta gcaatacgt atcctattga gcatagccgt ttcaattcg ggactaagg catcatgaag attgctatg tttgggcaat ttctataggt gtatcagttc ctatccctgt gattggactg agggacgaag aaaagtggt cgtgaacaac acgacgtgcg tgctcaacga ccaaatctt gttcttattg ggtccttcgt agcttcttc ataccgtga cgattatggt gattacgtat tgcctgacca tctacgttct gcgcgacaa gctttgatgt tactgcacgg ccacaccgag gaaccgctg gactaagctt ggatttctg aagtgtgca aggaatac ggccgaggaa gagaactctg caaacctaa ccaagaccag aacgcacgc gaagaagaa agcttcgaa agtcttggg attgtttct gcaccatgca ggctatcaac aatgaagaa agcttcgaa agtcttggg attgtttct ttgtgttct gatcatggtg tgcccaattt tcattaccaa tattctgtct gttcttgtg agaagtctg taaccaaag ctcatgaaa agcttctgaa tgtgtttgtt tggattggct atgtttgttc aggaatcaat cctctgtgtg atactctgtt caacaaaatt taccgaaggg cattctcaa ctatttgcgt tgcaattata agtgagaa aaagcctcct gtcaggcaga ttccaaagat tgcggccact gctttgtctg ggaggagct taatgttaac attatcggc ataccaatga accggtgatc gagaagcca gtgacaatga gcccggtata gagatgcaag ttgagaattt agagtaccca gtaaacctc ccagtggtgt tagcgaagg attagcagt tgtgagaag aacagcacag tcttttccca cggtaacaag tacatatgta ggaaaattt cttctttaat ttctctgtg gtcttaacta atgtaaatat tgctgtctga aaaagtgtt</p>
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16	134	5-HT2C Receptor	NP_000859.1	ctaattcctg tatgtatcc actacaggtt ttatgagact tcctattaat ttattaaatt tattaaatgt tgaaaaaa aaaaaaaa aaaa MNLNNAVHS FLVHLIGLLV WQCDISVSPV AAIVTDIFNT SDGGRFKFPD GVQNPALSI P VIIIIMTIGG NILVTMAVSM EKLNHATNY FLMSLAIDM LVGLLVMPLS LLAILYDYVM PLPRYICPVW ISLDVLFSTA SIMHLCAISL DRYVAIRNPI EHSRNSRTRK AIMKIAIWA ISIGSVPIPI VIGLRDEKV FVNNTCVLN DPNFLVIGSF VAFIPLTIM VITYCLTIYV LRQALMLLH GHTEEPPLS LDFLKCKRN TAEENSANP NQONARRRK KKERRPRGTM QAINNERKAS KVLGIVFFVF LIMWCPFFIT NILSVICEKS CNQKIMEKLL NVFWIGYVC SGINPLVYTL FNKIYRAFS NYLRNPKYVE KKPPVRQIPR VAATALS GRE LNVNIYRHTN EPVIEKASDN EPGIEMQVEN IELPVPSSV VSERISSV NM_000870	Homo sapiens
17	136	5-HT4 Receptor	NM_000870	cggtgcttat ttctgtaat ggacaaactt gatgctaagt tgaattctga ggagggtttc A gggtcaagtgg agaagtggtg gctgctcacg ttctctcga cggttatcct gatggccatc ttggggaacc tgggtgtgat ggtggctgtg tgctgggaca ggcagctcag gaaataaaa acaaattatt tcatgtatc tctgtctttt gcggatctgc tggtttcggt gctggtgatg ccctttggtg ccatgagct ggtcaagac atctgattt atgggaggt gttttgtctt gttcggacat ctctggacgt cctgctaca acggcatcga ttttcacct gtctgcatt tctctggata ggtattacg catctgctgc cagcctttgg tctataggaa caagatgacc cctctggca tgcattaat gctggaggc tgcctgttga tccccacgtt tattctttt ctccctataa tgcaaggctg gaataacatt ggcataattg attgataga aaagaggaag ttcaaccaga actctaactc tacgtactgt gtcttcattg tcaacaagcc ctacggcatc acctgctctg tggtagcctt ctacatcca ttctcctca tggctctgc ctattaccg atctatgtca cagctaagga gcatgcccac cagatccaga tgttacaacg ggcaggagcc tctctcgaga gcaggctca gtcggcagac cagcatagca ctatcgcat gaggacagag accaaagcag ccaagacct gtgcatactc atgggttgc tctgctctg ctgggacca ttctttgtca ccaatattgt ggatccttc atagactaca ctgtccctgg gcaggtgtg actgcttcc tctggtcgg ctatacaat tccgggttga accttttct ctacgcttc ttgaataagt cttttagacg tgcctctc atcactctct gctgtatga tgagcgctac cgaagacctt ccattctggg ccagactgtc cctgttcaa ccacaacct taatggatcc acacatgtac taaggatgc agtgagtggt ggtggccagt gggagagtea gtgcacccg ccagcaactt ctctttggt ggtgctcag ccagtgaca cttaggcccc tgggacaatg accagaaga cagccatgcc tccgaagag gccaggtcc taagtgtctg ctgtgctg actgcacccg gcattctctt cacctgaggc ttctcgctccg ccagtgacag aaccgggtgc tcgtggg	Homo sapiens
18	136	5-HT4 Receptor	NP_000861.1	MDKLDANVSS BEGFGSVEKV VLLTFLSTVI LMAILGNLLV MVAVCWDRQL RKIKTNYFIV P SLAFADLLVS VLMVPGAIE IVQDIWIYGE VFCLVTSLD VLLTASIFH LCCISLDTRY AICCCQPLVYR NKWTLPIAL MLGGCWVPT FISFLPIMQG WNNIGIDLI EKRKFQNSN STYCVFMWVK PYAITCSWA FYIPFLMVL AYRIYVTAK EHAHQIQLQ RAGASSESRP QSADQSHSTR MRTEKAAKT ICIIMGFCFL CWAPFFINI VDPFIDYTP GQVWTAFLWL GYNSGLNPF LYAFINKSFR RAFLIILCCD DERYRPSIL GQVTPCSTTT INGSHVLRD AVECGGQWES QCHPPATSPL VAAQPSDT	Homo sapiens
19	138	5-HT6	NM_000871	ccgagagcgc cccattcacc cccctcacc accctccccg gtcccaactt ccccgcaactc A	Homo

sapiens

Receptor

tgaccgccc ggaagccccc cccctatctt gccgcccggc cctccagg ggctctgtctc
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caga

Homo sapiens

NP_000862.1 MYPEGPTAN STPAWGAGPP SAPGGGWA AALCVVIALT AAANLLIAL ICTQPALRNT P
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SLDRYLLLS PLYKLRMP LRALALVIGA WSLAALASFL PLLLGHHELG HARPPVPGQC
RLIASLPVL VASGLTFELP SGAICFTYCR ILLAARKQAV QVASLTGMA SQASETLQVP
RTPRPGVESA DSRRLATKHS RKALKASLT L GILLGMFFVT WLPFFVANIV QAVCDICSPG
LFDVLTLGY CNSTWNPIY PLFMRDEKRA LGRFLPCPRC PRERQASLAS PSLRTSHSGP
RGLSLQQLV PLPLPPDSDS DSDAGSGSS GLRLTAQLLL PGEATQDPPL PTRAAAVNF
FNIDPAEPFL RPHPLGIPTN

5-HT6 Receptor

138

20

21	139	5-HT7 Receptor	NM_000872	<p>ccatgggcag cggcacacgg cggcgcgatg atggacgtta acagacgag cgcgccggac A ctctacgggc acctccgctc ttctctctg ccagaagtgg ggccggggt gcccacttg agcccgacg gtggcgccg cccggtcgcg gctccctgg cgcgcaccc gctgagcgag gtgacagcca gcccgccgc cactgggac ggccccggg acaatgcctc cggctgtggg gaacagatca actacggcag agtcagagaa gttgtgacg gctccatcc gacgtcacc acgtgtctga cgatcgccgg caactgcctg gtgtgatct cctgtgtctt cgtcaagaag ctccgccagc cctccaacta cctgatcgtg tccctggcg tggcgaccc cctggtggt gtggcggtca tgcctctcgt cagcgtcacc gacgtcatgt gggcgaagt gatcttggg cactttttct gtaatgtctt catcgccatg gacgtcatgt gctgcacggc ctgatcatg acctgtgctg tgatcagcat tgacaggtac ctgggatca caagcccc cacaacct gtgaggcaga atgggaaatg catggcggaag atgattctct cgtctggt tctctcgcc tccatcacct taccctccat ctttgatgg gctcagaatg taaatgatga taagtgtgc ttgatcagcc aggaatttg ctatacatt tactctacc cagtggcatt ttatatccc atgtccgtca tgccttctat gtactaccag atttacaagg ctgccaggaa gagtgtgcc aaacacaagt ttcctggctt cctcgagtg gagccagaca gctcatcgc cctgaatggc atagtgaagc tccagaagga ggtggaagag tgtgcaaac ttecgagact cctcaagcat gaaaggaaaa acatctccat ctttaagcga gaacagaaag cagccaccac cctggggatc atcgtcgggg cctttaccgt gtgtggctg ccatitttcc tctctcgac agccagaccc ttcatctgtg gcacttcctg cagctgcac ccactgtggg tggagaggac attctgtg ctaggtatg caaactctct cattaacctc ttatatatg ccttcttcaa cgggacctg aggaccacct atcgagcct gctccagtc cagtaaccga atatcaacc gaagcttca gctgcaggca tgcataagc cctgaagctt gctgagaggc cagagagacc tgagttgtg ctacaaaatg ctgactactg tagaaaaa ggtcatgatt catgattgaa agcagaacaa tggaag</p>	Homo sapiens
22	139	5-HT7 Receptor	NP_000863.1	<p>MMDVNSGRP DLYGHLRSFL LPEVGRGLPD LSPDGGADPV AGSMAPHLLS EVTASPAPTW P DAPPDNASGC GEQINYGRIE KVIIGSILTL ITLLITAGNC LVVISVCFVK KLRQPSNYLI VSLALADLSV AVAVMEFVSU TDLIGGKWF GHFFCNVFA DMVMCCTASI MTLCVISIDR YLGITRPLTY PVRQNGKMA KMILSVWLLS ASITLPLFG WAQNVNDDKV CLISQDFGYT IYSTAVAFYI PMSVLMFMY QIYKAARKSA AKHKFGFPR VEPDSVIALN GIVKLQKEVE ECANLSRLK HERKNISIFK REQKAATLIG IIVGAFTVCW LPFFLLSTAR PFICGTSCSC IPLWVERTFL WLGYANSLIN PFYAFENRD LRTTYRSLIQ CQYRNINRKL SAAGMHEALK LAERPERPEF VLQADYCRK KGHDS</p>	Homo sapiens
23	272	Adenosine A1 Receptor	NM_000674	<p>atgagtgtca gaagtgtgaa ggggtgcctg tctgaatccc agagcctcct ctccctctgt A gaggtgtgca ggtgaggaag ggtttaacct cactggaagg aatccctgga gctagcggt gctgaaggcg tggagtgtg ggggcacttg gacagaaacg tcaggacgac gggagctctg ccagctttgg tgaccttgg cgggcttgg agcgtgcgg cgggagccgg aggaactatga gctgcgcgc gttgtccaga gccacgcca cctcagcgg cgcggcccg agctctgtc cctggaactt tgggactgc ctctggacc cctgcggcc agcagcgagg atgtgtctt cctcgtgccc ctgtgtgccc gtctgtgat gtgccacg tgtgccgac atgccgccc ccatctcagc ttccaggcc ccctacatg gctcagagt gctcaccgc ctggtctctg tgccccggaa cgtgctgtg atctggcg tgaagtgtgaa ccaggcgctg cgggatgtcca</p>	Homo sapiens

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Receptor	Adenosine A2a Receptor	273	NM_000675	25	sapiens
LVIPLAILIN	IGPQTYFHTC	LMVACPVLIL	TQSSIALIA	IADVRLYLRVK	IPLRYKMVVT
PRRAVAIAG	CWILSFVGL	TMFGWNILS	AVERAWAANG	SMGEPIVKCE	FEKVISMEYM
VYFNEFWVL	PPLILMVLIY	LEVFIYLRKQ	LNNKVSASSG	DPQKYGKEL	KIAKSLALIL
FLFALSWLPL	HILNCITLFC	PSCHKPSILT	YIAIFLTHGN	SAMNPVIVAF	RIQKRVTFEL
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26	273	Adenosine A2a Receptor	NP_000666.
27	274	Adenosine A2b Receptor	NM_000676

28	274	Adenosine A2b Receptor	NP_000667.1	MLLETQDALY VALEIVIAAL SVAGNVLVCA AVGTANTLQT PTNYFLVSLA AADVAVGLFA P IPFAITISLG FCTDFYGCIF LACFVLVLTQ SSIFSLLAVA VDRYLAICVP LRYKSLVTGT RARGVIATLV VIAFGIGLTP FLGWSKDSA TNNCTEPWDG TTNESCCLVK CLFENVVPMS YMYVFNFFGC VLPPLILMLV IYIKIFLVAC RQLQRTLEMD HSRTLQREI HAAKSLAMIV GIFALCWLFP HAVNCVTLFQ PAQGNKPKW AMNMAILLSH ANSVNPIVY AYNRDRFYT FKHIISRYLL CQADVKSNG QAGVQPALGV GL	Homo sapiens
29	275	Adenosine A3 Receptor	NM_000677	atctttgctg caaaggctgg gtatcggtcg tgctcagcaa agcgtcaact cgtgcaagaa A cttagcagga atagttctgg ttaaggttag gagctgcca ccaagctctc tttttgttc ctctgctct cccgtttgccc tcttatcat gagctctttt tgctaaagctg gcagaaagat tgcatagtca gtgcttccag ctctgctccc accgtatcct gcactgtcct ctggtccctg aatgaatgaa ctctgatacc caatctgtc tggagccttc tctatgccac tcatggctcc tctttgtctc ttccatctt ttgctgaga gtctctgagt ctgtacttcc tcttggccca tctcacttcc tgaacacccc ctgaagaggg ttgcttatct tgatggaact caaaaagcca aaaagctgca ggcagagggc ttgaggacat ctgtttgggg aactaagagc agcagcactt tcagattcag tccatataga gctgtctac agcattctgg aaactgagg atgtgctggg cataaagggg ctggaagtga cccacctgtg atgagccctt tctaaaggaga aggtttcca agagatcacc ccaccagaaa aggttaggaa tgaagagtt ggaatttta gactgtcact gcacatggac ctctgggaag acgtctggcg agactaggc ccactggccc tacagacgga tcttgcctgc tcacctgtcc ctgtggaggt tcccctggga aggcagatg cccaacaaca gcactgtct gtcatggcc aatgttacct acataccact ggaattttt attgactct ggccatagt gggcaacgtg ctggtcatct gcgtggtcaa gctgaacccc agcctgcaga ccaccactt ctatttcat gtctctctag ccttgcttga cattgtgtt ggggtgctg tcatgcttt ggccattgtt gtcagcctgg gcatacaaat ccactctac agctgcttt ttatgacttg cctactgctt atctttacc agcctccat catgtccttg ctggccatcg ctgtggaccg atacttgctg gtcaagctta ccgtcagata caagagggtc accactaca gaagaatag gctggccctg ggcctttgct ggctggtgtc attcctgggtg ggaatgaccc ccatgtttgg ctggaacatg aaactgacct cagagtacca cagaaatgtc accttccctt catgccaatt tgtttcgtc atgagaatgg actacatggt atacttcagc ttctcactt ggattttcat ccccttggtt gtcatgtcg ccactctatc tgacatcttt tacatcattc ggaacaaact cagctggaac ttatctaaact ccaagagac aggtgcattt tatggacggg agttcaagac ggctaagtcc ttgtttctg ttctttctt gttgtctg tcatggctgc ctttatctat catcaactgc atcatctact ttaatggtga ggtaccacag cttgtgctgt acatgggcat cctgtgtcc catgccaact ccatgatgaa cctatcgtc tatgcctata aaataaagaa gttcaaggaa acctacctt tgatcctcaa agcctgtgtg gtctgccatc cctctgattc ttggacaca agcattgaga agaattctga gtagttatcc atcagagatg actctgtctc attgaccttc agattcccca tcaacaaaaa cttgagggcc tgtatgcctg ggccaaagga tttttacatc cttgattact tccactgagg tgggagcatc tccagtgtc cccaattata tctccccac tccactactc tcttctcca acctatttt ccttgtctc ttctctctaa ttcagtgttt tggagcctg acttggggac aacgtattat tgatatatt gtctgttttc ctcttccca atagaagaat aagtcatgga gcctgaaggg tgcctagtgtg acttactgac aaaggtctct agttgggctg aacatgtgtg tgggtgtgac tcatttccat	Homo sapiens

30	275	Adenosine A3 NP_000668.1 Receptor	gccattgtgg aattgagcag agaacctgct ctcgaggat gcctagaaga tgttgggaac agaagaaata aactgagttt aaggggact taaactgctg aattcacctg tggatgtttt tgagtaataa aaagctaata g	Homo sapiens
31	309	Melanocortin NM_000529 2 Receptor (adrenocorti cotropic hormone) (MC2R)	VGVLVPLAI VVSLGITHF YSCLFWTCLL LIFTHASIMS LLATAVDRL RVKLTVRYKR VTHRRWLIA LGLCHWVSL VGLTPMEGN MKLTSEYHRN VTFLSCQFVS VMRMDYMYF SFLTWIFIP VMCAYLDI FYIIRNKL SLNLSKETGA FYGREFKTAK SLFLVLELFA LSWLPISI CIIYFNGEVP QLVLYMGILL SHANSMNPI VYAYIKKFK ETYLLILKAC VVCHPSDSL TSIEKNSE atgaagcaca ttatacaact gtatgaaac atcaacaaca cagaagaaa taattccgac A tgtctctgtg tggtttggc ggagagata ttttcacaa ttccattgtg tggagttttg gagaatctga tgcctctgtg gctgtgttc aagaataaga atctccaggc acccatgtac ttttcatct gtagctggc catatctgat atgctgggca gcctatataa gatcttgaa aatatctga tcaattgag aacatgggc tatctcaagc cagtgggcag tttgaaacc acagcagatg acatcatga ctccctgtt gtctctccc tgcctggctc catctcagc ctgtctgtga ttgctgcga ccgtacatc accatcttc acgcactgc gtaccacagc atcgtgacca tgcgcgcac tgggtgggtg cttaacgtca tctggacgtt ctgacgggg actggcatca ccatggtgat ctctcccat catgtgcca cagtgatcac ctteacgtcg ctgttccgcg tgatgtggt ctctcatctg tgcctctatg tgcacatgtt cctgctggct cgatccaca ccaggagat ctccacctc cccagagcca acatgaaagg ggcacatcaca ctgaccatcc tgcctgggtg ctteacttc tgcctggccc ccttctgtct ctcatcctc ttgatgacat tctgcccaag taacctctac tgcgcctgct acatgtctct ctccaggtg aacggcatgt tgatcatgt caatgccgtc attgacctc tcatatgc ctccggagc ccagagctca gggacgcat caaaaagatg atctctgca gcagtactg gtag FFICSLAISD MGLSLYKILE NILILRNMG YLKRGSFET TADDLIDSLF VLSLGSIFS LSVIAADRYI TIFHALRYHS IVTMRRTVV LTVIWTFCTG TGIWVIFESH HVPVTITFTS LFPLMLVFIL CLYVHMFLA RSHTRKISTL PRANKGAI LTILGVFIF CWAPFVLHVL LMTFCPSNPY CACYSLEQV NGMLMCNAV IDPFIYAFRS PELDAFKKM IFCSRYW	Homo sapiens
32	309	Melanocortin NP_000520.1 2 Receptor (adrenocorti cotropic hormone) (MC2R)	tcctgccgcg cgctcgttct gtgcccccg cccggccacc gacggcccg cgttgagatg A actttccgcg atctcctgag cgtcagttc gaggacccc gcccgacag cagcgaggg ggctccagcg cgggcggcg cgggggcagc gcggcgggcg cgcgtggtgg cgagggccc gcggtggcg gcgtgcggg gggcgcggc ggcggcgggc gcgtggtgg cgagggcagc ggcggagaca accggagtc cggggggag cggggcgagc cggcgcggg cgcgagcgtg aatggcaagg cggcgcgtcg gggactggtg gtgagcgcg agggcggtgg cgtggcgctc ttcctggcag ccttcact ctatggcgtg gcaggtaac tgcctgtcat cctctcagtg gcctgaacc gccacctgca gccgtcac aactattca tccgtgaacct ggcgtggcc gacctgctg tgagcgccac cgtactgcc ttctcgccc ccatggaggt tctgggcttc tgggctttg gccgcctt ctgcgacgta tggggcccg tggagctgct gtgctgcacg gcctccatcc ttagcctctg caccatctc tgggacggt acgtggcgct gcgccactca	Homo sapiens
33	376	Alpha 1d- adrenoceptor		Homo sapiens

34	Alpha 1d- adrenoceptor	NP_000669.1	376	<p>ctcaagtacc cagccatcat gacgagcgc aagcgggcgc ccactcctggc cctgctctgg gtcgtagccc tgggtgtgtc cgtaggccc ctgtgggct ggaaggagcc cttgccccct gacgagcgt tctgggtat caccaggag gcggtctacg ctgtctctc ctcgctgtgc tcctttacc tggccatggc ggtcatcgtg gtcagtact gccggtgta cgtggtcgcg cgacgacca cgcgagcct cgaggcaggc gtcaagcgcg agcgaggcaa ggcctccgag gtggtgtgc gcatccactg tgcggcgcg gccacggcg ccgacggggc gcacggcatg cgacgcga agggccacac ctccgcagc tgcgtctccg tgcgctctct caagtctctc cgtgagaaga aagcgccaa gactctggc atcgtcgtg gtgtcttctg cctgtctgg ttccctttct tcttgtctt ccgctcggc tcttgttcc cgcagctgaa gccatcggag ggcgtcttca aggtcatctt ctggtctcgc tacttcaaca gctgctgaa ccgctctac tacctctgt ccagcgcga gtccaagcgc gcttctctc gctcctcgt ctcgcatgac cgtcgtgcc ggcgcgcgc cctctcttg cgtgtctac gccaccactg gcgggcctcc accagcgcc tgcgccagg ctgcgcccc agttcgggcg acgcgcccc cggagcgccg ctggccctca ccggtctcc cgaccgcac ccgaacccc caggcacgcc cagatgcag gctcgcgtc ccagcgcgtc aaagccacc agcctctcc gcgagtgag gctgctggg ccgttccgga gacccagac ccagctgcgc gccaaagtct ccagctgtc gcacaagac cgcgccggg gcgcgcagc cgagaggca gctgcgccc agcgtcaga ggtgaggct gttccctag ggtcccaaca caggtggcc gaggcgcca cctgccagg ctaagaattg gccgactaca gcaacctac ggagaccgat attaaggac ccaagacta ggcgcggag tgtgtggc ttgggggtaa ggggaccag agagcgggc tgggttctc agagccccg tgcaaatcgg agaccggaa actgacagg gcagctgctc tgtgacatc ctgaggaact gggcagact tgaggctga gccctgaaa ggtgaaaagt agtggggccc cctgctggc tcaggtgcc agaactctt tctagaag gagagctgc gggctccgtg gggcctttg ctcccaatcc ctatttgaga aacactgccc cactctccat gccctgaacc ctgagtagac agcccaagc atggccagg agcctgccc SGEDNRSAG EPGSAGAGD VNGTAAVGL VVSAQGVGV FLAAILMA VAGNLLVILS VACNRHLQTV TNYFIVNLAV ADLLSATVL PFSATMEVLG FWAFGRAFCD VMAAVDVLCC TASILSLCTI SVDRYVGVHR SLKYPAMTE RKAAILALL WVVALVSVG PLLGWKEPVP PDERFCGITE EAGYAVFSSV CSFYLPMVI VMYCRVYV ARSTTRSLA GVKRERGKAS EVVLRHCRG AATGADGAHG MRSAGKHTFR SLSVRLLKF IYPCSSREFK RAFLLRLCQ WFFFFFLPL GSLFPQLKPS EGVKVI FWL GYFNSCNPL IYPCSSREFK RAFLLRLCQ CRRRRRRPL WRVYGHWRRA STSGLRQDCA PSSGDAPPGA PLALTALPDP DPEPPCTPEM QAPVASRRKP PSAREWRLL GFERRPTQL RAKVSSLSHK IRAGGAQRAE AACARSEVE AVSLGVPHEV AEGATCOAYE LADYSNLRET DI</p>	Homo sapiens
35	Alpha 1b- adrenoceptor	NM_000679	377	<p>agggcagaga cgtgctcgg gctggctgc ccgggggaga tgactcctgc caggaggcg A cctctggaa gaagaccag ggggaagcaa agtttcagg cagctagga gccttcgccc cagcccttc gagcccaatc atccccagg ctatggagg cggactctaa gatgaatccc gacctggaca ccggccacaa cacatcagca cctgcccact ggggagagtt gaaaaatgcc aacttactg gcccaacca gacctcagc aactccacac tgccccagct ggacatcacc agggccatct cttgtggcct ggtgctggc gccttcaccc tcttggccat cgtgggcaac</p>	Homo sapiens

36	Alpha 1b- adrenoceptor	NP_000670.1	<p>atcctagtca tcttgtctgt ggccctgcaac cggcacctgc ggacgcccac caactacttc attgtcaacc tggccatggc cgaactgctg ttgagctctc cgcctctgce cttctcagcg gccctagagg tgcctgggta ctgggtgctg gggcgatctc tctgtgacat ctggggcagcc gtgatgtcc tgtgtgac agcgtccatt ctgagcctgt gcgcacatc catcgatcgc tacatcgggg tgcgtactc tctgcagtat cccacgctgg tcaccggag gaagccatc ttggcgctgc tcaagtctg ggtctgtcc accgtcatct ccatcgggcc tctccttggg tggaaggagc cggcacccaa cgaatgacaag gagtgcgggg tcaccgaaga acccttctat gccctcttct cctctctggg ctctctctac atcctctac cggctattct agtcatgtac tgcctgtct atatagtgg caagaaga accaagaacc tagagcgag agtcatgaag gagatgtcca actccaagga gctgacctg aggtaccatt ccaagaact tcacgaggac acccttagca gtaccaagg caaggccac aaccacagga gtccatagc tgcacaact tttaagtct ccaggaaaa gaaacagct aagacgttgg gcatgtgtt cggatgttc atcttgtct ggtaacctt ctcatcgt ctaccgctt gctccttgt ctcacacctg aagcccccg acgcgtgtt caagtgtgt tctggctgg gctacttcaa cagctgcctc aaccctatca tctaccatg ctccagcaag gattcaagc gcgcttctg cgcctcctc gggtgccagt gccgcggcg cggccggcg cgaagccgc gcgcgctgc cctggcgccg tgcctctaca ctaccggcg gtggacgcg ggcgctcgc tggagcgtc gaagtgcgc aaggactcgc tggacgacag cggcagctgc ctgagcgga gccacggag cctgcctcg gcctcgcca gccgggcta cctggcgcg cggcgccac gccagtcga gctgtgcgc ttcccgagt ggaaggcgcc cggcgccctc ctgagcctc cgcgcctga gcccccggc cggcgcgcc gccacgact cggcgccctc ttacacttca agtctctgac cgaagccgag agccccgga cgaagcgcg gccacgaac ggaggtgtgc aggcgcggc cgaagtgcc aacggcgag cgggcttcaa aagcaacatg cccctggcg cggcgagtt ttaggggccc cgtgcgagc ttcttctcc tggggaggaa aacatcggtg ggggga</p>	Homo sapiens
37	Alpha 1c- adrenoceptor	NM_000680	<p>VGNILVLSV ACNRLRTP NYFIVNLAMA DLLSTFVLP FSAALEVLGY WVLGRIFCDI WAAVDLCCT ASILSCAIS IDRYIGVYRS LQYTLVTRR KAILALLSV VLSTVISIGP LLGWKEPAPN DKECGVTEE PFYALFSSLG SFYIPLAVIL VMYCRVYIVA KRITKNLEAG VNMKMSNSKE LTRIHKNF HEDTLSTKA KGNPRSSIA VKLFESREK KAATLGIVV GMFILCWLPF FIALPLGSLF STLKPPDAVF KVFVWLGYN SCNLPIIYPC SSKEFKRAFY RILGCQCRGR GRRRRRRR LGGCAVYRP WTRGGSILERS QSRKDSLDDS GSCLSGSQRT LPSASPSPGY LRGAPPPEV LCAFPEWKAP GALLSLPAPE PPGRGRHDS GPLFTFKLLT EPESPTDGG ASNGGCEAAA DVANGQPGFK SNMPLAPQGF gaattccgaa tcatgtgcag aatgctgaat cttccccag ccaggacgaa taagacagcg A cggaagaqca gattctcga attctggaat tgcattgtgc aaggatctc ctggtacttc gcacccagct tgggttaggg agggagtccg ggtcccgagg taggcagcc cggcaggtgg agagggctcc cggcagcccc gcgcgccct ggcatgtct ttaatgccct gcccttcat gtggccttct gagggttccc agggctggcc aggttggttt cccaccccg cgcgctctt caccceagc caaacccacc tggcagggct cctctcagc gagaccttt gattccggc tcccgcctc cgcctccgc gccagcccg gaggtggccc tggacagccg gacctggcc ggccccggtt gggaccatgg tgttctctc gggaaatgct tccgacagct ccaactgac</p>	Homo sapiens

38	Alpha 1c- adrenoceptor	NP_000671.1	<p> ccaacgcgcg gcacgggtga acatttccaa ggccattctg ctccgggtga tcttgggggg cctcattctt ttcgggggtgc tgggtaacat cctagtgatc ctctccgtag cctgtcaccc aacctgcaac tcagtcacgc actactacat cgtcaacctc gcggtggcgc acctcctgct cacctccacg gtgctgccct tctccgcat ctccaggctc ctaggctact ggcctctcgg caggtcttc tgaacatct ggccggcagt ggaatgtctg tctgtcaccc cgtccatcat ggcctctgc atcatctca tcgacogcta catcgccgtg agctaccgcg tgcgtacccc aacctacgtc accagagga ggggtctcat ggctctgctc tgcgtctggg cactctccct ggtcatatcc attgaccccc tgttcggctg gaggcagctc gcccccaggc acgagacct ctgceagtc aacgagagc cgggctacgt gctctctca cgcctgggct cctctacct gcctctggcc atcatctgg tcatgtactg ccgctctac gtgtggcca agaggagag ccggggctc aagtctggcc tcaagaccga caagtccgac tcggagcaag tgacgtccc catccatcgg aaaaacgccc cggcaggagg cagcgggatg gccagcgcca agaccaagac gcactctca gtgaggctcc tcaagttctc ccgggagaag aaagcgcca aacgctggg catcgtggtc ggtcgtctcg tctctgctg gctgctctt tcttagtca tgccattgg gtctttctc cctgatttca agcctctga aacgttttt aaatagtat tttggctcgg atatctaac agctgcatca acccatcat ataccatgc tccagccaag agttcaaaa ggcctttcag aatgtcttga gaatccagt tctccgaga agcagctctt ccaacatgc cctgggtac accctgacc cgcacagcca gccctggaa ggccaacaca aggacatggt gcgatcccc gtgggatcaa gagagacct ctacagatc tccaagacg atggcgttg tgaatggaaa ttttctctt ccatgcccc tggatctgc aggtatcacg tgcacaaga ccaatctcc tgtaccacag cccgggtgag aagtaaaag ttttggagg tctgtctg tgtagggccc tcaaccccca gcctgacaa gaacatcaa gtccaacca ttaaggcca caccatccc ctcatgaga acggggagga agtctaggac aggaagatg cagaggaag gggaataatc ttagttacc acccacttc ctctcggaa gccagctct tcttgagga caagacagga ccaatcaaa aggggacctg ctgggaatg ggtgggtggt agaccaact catcaggcag cgggtagggc acagggaaga gggagggtgt ctcaacca accagttcag aatgatacgg aacagcatct cctgcagct aatgcttct tggteactct gtgccactt caacgaaaac caccatggga aacagaatt catgcacaat ccaaaagact ataatatag gattatgatt tcatcatgaa tatttgagc acactcta agttggagc tattcttga tggaagtga gggattttat tttcaggctc aacctactga cagccacatt tgacattat gccggaattc </p>	Homo sapiens
379	Alpha 1c- adrenoceptor	NP_000671.1	<p> MVFLSGNASD SSNCTQPPAP VNISKAILLG VILGGLLFG VLGNIILVLS VACHRLHSV P THYIYINLAV ADLLTSTVL PFSAlFEVLG YWAFGRVFCN IWAADVLC TASIMGLCII SIDRYIGVSY PLRYPTIVTQ RRGIMALLCV WALSLVISIG PLFGWRQPPAP EDETCQINE EPGYLFSAL GSFLPLAI IVMYCRVYV AKRESGLKS GLTKDSKDSSE QVTLRIHRKN APAGSGMAS AKTKTHESVR LLKFSREKKA AKTLGIWVGC FVLCWLPFFL VMPISGFFPD FKPSETVEKI VEWLGYLNSC INPIIYPCSS QEFKRAFQNV LRIQCLRRKQ SSKHALGYTL HPPSQAVEGQ HKDMVRIPVG SRETFYRISK TDGVCWEKFF SSMRGSARI TVSKDQSSCT TARVRKNSFL EVCCCVGPST PSLDKNHQVP TIKVHTISLS ENGEV </p>	Homo sapiens
39	Alpha 2a- adrenoceptor	NM_000681	<p> ggcctcgccg ccacacaggt ggacgcccag gagaacctc gcctccgtc cggctcctgg A afagctgac gtccacatgc cccggcccgc ctgaggacg ggtgctctc atcgggcccc </p>	Homo sapiens

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40	Alpha 2a- adrenoceptor	AAA51664.1	gctcacaaaa ggtaaatgga tgggggttac ctagccctgg ctaattcccc tccattccc aactctctct ctccttttga agaaaatgc taaggcgagc cctgctgcgc cteccatcc cccgtgttaa atatacata tttttgatag cacacatggg gcccccatat ccttggtgct tggttttgat gttgaaatcc tggccttggg agagatgcct tccaggcaga cacagtgtc tggttcaggc caagcccttt tgaatgcaa gccctttctg gtgttatgaa gtcctctat gtcgtcgttt tcaccagcaa ctggtgactg tccctctgac acggacctgc tttgagattt cctgacaggg aaaagatttc tgtccatttt tttctgtgct ctaacagcat aattgccttt tccatgttaa atattatgat ggtggtatcaa gacataagta aatgagcctt tctgctcac atcagccctg tgtataaagc cattattctc tgatgcactg tttgccccag taactcaact taaaacctct cttccagtg ttcctctctc cctccaggg ccactgcttg aagagaata tgtatgtttc tatcttat agctgctggt tttagactcc aaggagtga aattatgtg aagaagcaa gaaatctttt agctgctggt gtaaacagtt tgaagagaca aatggcctg ccaactgta cctgatacaa tttgcccaag gtaaacagtt gtaagagaca aatggcctg ccaactgta cagttcttc cccaagagct gttaggtatc aaatgttgt ccttcccccc ctcgtgctt ttctggttga gatcatgtca ttgatgaact gcaaaagta ggggaggagg gcagagactt tgtgtttaca tctgcatitc tacatgtttt agacagagac aatttaaggc ctgactctt atttactaa agaaaaacta atgtcagcac atgttgctaa tgacagtga ttttttta ataaaaaag tttacagatc aaatgtgaaa taaatatgaa tggagtggtc aaa MGS LQPDAGN ASWNGTEAPG GGARATPYSL QWTLTLVCLA GLMLTLTVFG NVLVIIVFT P SNALKAPQNL FLVSLASADI LVATLTVFES LANENGYWY FGKTWCEIYL ALDLFCTSS IVHLCAISLD RWSITQAI EYNLKRTPRRI KAIITCWVI SAVISFPPLI SIEKKGSGG PQPAEPRCEI NDQWYVISS CIGSFAPCL IMILVYVRI QIAKRTRVP PSRRGPDAVA APPGGTERRP NGLGPERSAG PGGAELPLP TQNLGAPGE APAGPRDTDA LDLESSSSD HAERPPGPRR PERGPRGKGK ARASQVKPGD SLRGAGRGR GSGRRQLQGRG RSASGLPRRR AGAGGQNLK RFTFVLAVI GVFWCWFPF FPTYTLTAVG CSVPRTLEKE FFWFGYCNS LNPVIYTFN HFRRAFKKI LCRGDRKRIV 41	Alpha 2b- adrenoceptor	NM_000682	atggaccacc aggaacccta ctcctgtcag gccacagcgg ccatagcggc ggccatcacc A ttctctcattc tctttaccat cttcggcaac gctctgttca tcctggctgt gttgaccagc cgctcgtgc ggcacctca gaacctgttc ctggtgtcgc tggcggccgc cgacatcctg gtggccacgc tcatatccc tttctcgtg gccaacgagc tgcgtggcta ctggtacttc cggcgacgt ggtgcgaggt gtacctggcg ctcgacgtgc tcttctgcac ctcgtccatc gtgcacctgt gcgccatcag cctggaccgc tactgggccc tgaagcgcgc gctgagtagc aactccaaag gcacctgcgc cgcgatacag tgcataatcc tcactgtgtg gctcatcgcc gcccgtcatct cgctgcgcgc cctcatctac aaggcgacc agggccccc gccggcggg cgccccagtg gaaagtcaa ccaggaggcc tggtaatatc tggcctccag catcgatct ttctttgtc cttgctcat catgatcctt gtctactcgc gcatctacct gatcgccaaa cgcagcaacc gcagaggtcc cagggccaaag ggggggcctg ggcaggggtga gtccagcag ccccgacctg acctgtgtg ggccttggcc tcagccaaac tggcagccct ggcctctgtg gcttctgcca gagaggtcaa cggacactcg aagtcactg gggagaagga ggagggggag acccctgaag atactgggac cgggaccttg ccacctgtt gggctgcctt tcccaactca ggccagggcc agaaggaggg tgttgtggg gcactccag aggatgaagc tgaagaggag	Homo sapiens	Homo sapiens
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 gctattttat caataaagga tatttgttaa taag

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42 388 Alpha 2b- NP_000673.1 MDHQPYSVQ ATAAIAAAT FLILTFGN ALVILAVLTS RSLRAPQNLF LVSLAADIL P

[illegible]

44	389	Alpha 2c- adrenoceptor	NP_000674.1	<p> MASPALAAL AVAAAGPNA SGAGRGSGG VANASGASWG PPRGOYSAGA VAGLAAVVGF P LIVFTVGVN LVIAVLTSR ALRAPQNLFL VSLASADILV ATLVMPFSLA NEIMAYWYFG QWCGVYLAL DVLFTSSIV HLCALSIDRY WSVTQAVEYN LKRPFRVKA TIVAVWLISA VISFPLVSL YRQPDGAAYP QCLINDETWY ILSSICIGSFF APCLINGLVY ARIYRVAKRR TRTLSEKRAP VGPDGASPTT ENGLGAAAGE ARTGTARPRP PTWSRTRAAQ RPRGGAPGPL RRGRRRAGA EGGAGGADGQ GAGPGAQSQ ALTARSPGP GGRLSRASSR SVEFFLSRRR RARSSVCRRK VAQAREKRF FVLAVVMGVF VLCWFPEFFFI YSLYICICREA CQVPGPLFKF FFWIGYCNSS LNPVIYTVFN QDFRPFKHI LFRRRRRGR Q ctgtgcatgg catcatctcg gccctctcta gagctccaat cctccaacca gagccagctc A ttccctcaaa atgctacggc ctgtgacaaat gctccagaag cctgggacct gctgcacaga gtgctgccga cattatcat ctccatctgt tctctcggcc tcctagggaa ctttttgc ctgttggtct tctctcggc ccggcgccaa ctgaacgttg cagaaatcta cctggccaac ctggcagcct ctgacttgggt gtttgtcttg ggttgccct tctgggcaga gaatatctgg aaccagtta actggccttt cggagccctc ctctgcctg tcatacaagg ggtcatcaag gccaatgtg tcatcagcat ctctcgtgtg gtggccatca gccaggaccg ctaccgctg ctggtgcacc ctatggccag cgggaaggcag cagcggcgga ggcaggcccc ggtcacctgc gtgctcatct ggggtgtggg gggcctcttg agcatcccca cattctgct gcgaccatc caagccgtcc cagatctgaa catcacccgc tgcactctgc tcctccccc tgaggcctgg cactttgcaa ggaattgtga gtaaatatt ctgggtttcc tcctaccact ggtgcgcatc gtctttctca actaccacat cctggcctcc ctgcgaacgc gggaggaggt cagcaggaca agagtgcggg ggcgaagga tagcaagacc acagcgtga tcctcacgct cgtggttgcc ttcctgtgct gctgggcccc ttaccacttc ttgccttcc tggaattctt attccaggtg caagcagtc gaggtgctt ttgggaggac ttcatcgacc tgggctgca attggccaac ttctttgct tcaataacag ctccctgaat ccagtaattt atgtctttgt gggcggctc ttcaggacca aggtctggga actttataaa caatgaccc ctaaaagtct tgcctcaata tcttcaccc ataggaaaga aatcttccaa cttttctggc ggaattaaaa cagcattgaa cc </p>	Homo sapiens
45	599	Bradykinin B1 Receptor	NM_000710	<p> ctgtgcatgg catcatctcg gccctctcta gagctccaat cctccaacca gagccagctc A ttccctcaaa atgctacggc ctgtgacaaat gctccagaag cctgggacct gctgcacaga gtgctgccga cattatcat ctccatctgt tctctcggcc tcctagggaa ctttttgc ctgttggtct tctctcggc ccggcgccaa ctgaacgttg cagaaatcta cctggccaac ctggcagcct ctgacttgggt gtttgtcttg ggttgccct tctgggcaga gaatatctgg aaccagtta actggccttt cggagccctc ctctgcctg tcatacaagg ggtcatcaag gccaatgtg tcatcagcat ctctcgtgtg gtggccatca gccaggaccg ctaccgctg ctggtgcacc ctatggccag cgggaaggcag cagcggcgga ggcaggcccc ggtcacctgc gtgctcatct ggggtgtggg gggcctcttg agcatcccca cattctgct gcgaccatc caagccgtcc cagatctgaa catcacccgc tgcactctgc tcctccccc tgaggcctgg cactttgcaa ggaattgtga gtaaatatt ctgggtttcc tcctaccact ggtgcgcatc gtctttctca actaccacat cctggcctcc ctgcgaacgc gggaggaggt cagcaggaca agagtgcggg ggcgaagga tagcaagacc acagcgtga tcctcacgct cgtggttgcc ttcctgtgct gctgggcccc ttaccacttc ttgccttcc tggaattctt attccaggtg caagcagtc gaggtgctt ttgggaggac ttcatcgacc tgggctgca attggccaac ttctttgct tcaataacag ctccctgaat ccagtaattt atgtctttgt gggcggctc ttcaggacca aggtctggga actttataaa caatgaccc ctaaaagtct tgcctcaata tcttcaccc ataggaaaga aatcttccaa cttttctggc ggaattaaaa cagcattgaa cc </p>	Homo sapiens

46	599	Bradykinin B1 Receptor	NP_000701.1	MASSWPPELE QSSNQSLQFP QNATACDNAP EAWDLLHRVL PTFIISICFF GLGNLFVLL P VFLPRRLQIN VAEIYLANLA ASDLVFVLGL PFWAENIWNQ FNFVFGALLC RVINGVIKAN LFISIFLVA ISQDRYRVIV HPMASGRQQR RROARVTCVL IWVVGGLLSI PTFILRSIQIA VPDLNITACI ILLPHEAWHF ARIVELNIG FLLPLAAIVF FNYHILASL TREVSRTRV RGPKDSKTTA LILTLVAVFL VCAWPHYFFA FLEFLFQVQA VRGCFWEDFI DLGLQLANFF AFTNSSINPV IYFVGRFLR TKWELYKQC TPKSLAPISS SHREIFQLF WRN	Homo sapiens
47	600	Bradykinin B2 Receptor	NM_000623	atgttctctc cctggaagat atcaatgttt ctgtctgttc gtgaggaact cgtgccacc A acggctctct tcagcgccga catgtccaat gactcttgc aaggccccc tcttaacggg acctttgcc agageaaatg cccccaagt gtgagcttg cttggctcaa caccatccag cccccttc tctgggtgct gtctgtctg gccacctag agaactatct tgtctcagc gtctctgcc tgcacaagag cagctgcacg gtgcacaga tctacctgg gaacctggc gcageagacc tgatctggc ctgcgggctg ccttctggg ccatcaccat ctccaacaac ttcgactggc tctttggga gacgtctgc cgtgtgtga atgccattat ctccatgaac ctgtacagca gcattctgtt cctgatgctg gtgagcatcg accgtacct ggcctgggtg aaaaacatgt ccatgggccc gatgcggcg gtgcgtggg ccaagctcta cagcttggg atctgggggt gtacgtgct cctgagctca cccatgctg tgtccggac catgaaggag tacagcgatg agggccacaa cgtcacccgt tgtgtcatca gtaaccatc cctcatctgg gaagtgttca ccaacatgct cctgaatgtc gtgggtcttc tctgccccct gagtgtcatc accttctgca cgtgcagat catgcaggtg ctgcggaaca acgagatgca gaagttcaag gagatccaga cggagaggag ggccacggtg ctagtctctg ttgtctgct gctattcatc atctgtggc tggccttcca gatcagcacc ttcctggata cgtgcatcg cctcggcatc ctctccagct gccaggacga gcgcatactc gatgtaatca cacagatcg cctcttcabg gcctacagca acagctgcct caaccactg gtgtaactga tctgtggcaa gcgttccga aagaagtctt gggaggtgta ccaggagtg tgcagaaag ggggtgtag gtcagaaccc attcagatgg agaactccat gggcacactg cggacctcca tctcgtgga acgccagatt cacaaactgc aggaactggc agggagcaga cagttagcaa acgccagcag ggtgtgtg aatgtgtga aggatggag gacagtgtct tttagcatg ggccaggaa tgccaaaggag acatctatgc acgaccttg gaaatgagtt gatgtctcg gtaaacacc ggagactaat tctgtccctg cccaatttg caggagcat ggctgtgagg atgggtgaa ctacgcaca gccaaaggact ccaaatcac aacagcatta ctgttcttat ttgtgccac acctgagcca gctgtctct tcccaggat ggaggaggcc tggggggagg gagaggagtg actgagcttc cctccgtgt gtctcgtc cctgccccag caagacaact tagatctcca ggagactgc catccagctt tgggtcaatg gctgagtga caagttagtt gtgacctgg gtttcttaa tctattcagc tagaacttg aaggacaatt tcttgatta ataaaggtta agcctgagg ggtccctgat acaacctgg agaccaggat tttaggtc cctcactga tggacaagga ggtctgtgcc aaagaagaat ccaataagca catattgagc acttctgta tatgcagtat tgagactgt aggcagacc caagaagag aaggagccat ctccatctt aaggaactca aagactcaag tgggaacgac tgggactgc caccaccaga agctgttcc aggagcgg cagagcaggt gctgtgggtg atatggacag cagaaggggg agaccaaggt tccagctcaa ccaataacta ttgcacaacc acctgtccct gcctcagttc cctttatgt aacatgaat cggtgtgagg gtaaaaggca gtaacaggta taaagtactt agaaaagcaa aggtgtgtac	Homo sapiens

48	600	Bradykinin B2 Receptor	NP_000614.1	<p> gtaacatgta ggcatcatta cgcagacgta actgggatat gttactata agaaaagac actgaggtct agaaatagct ccgtggagca gaatacgtat tggagccgg tggcgggtgtg aagcaccagt gctcggcaca cagtaggctc tcattggctc cctccacct gteattccca ccacctgag gcccaaccg ccacacac aggagcattt ggagagaag ccattgtctc aaagtctgat ttgtatgag gcagaggaag atatttctaa tcgtctctgc ccagaggatc acagtgtga gacccccac caccagccgg tacctgggaa gggggagagt gcaggccctgc tcagggactg ttcctgtctc agcaaccaag ggattgttcc tgtcaatcaa tggtttatg gaagtgcc cagtagagc cctagaagag tgtgaanaag aatgcaatg tgtttcacca tcggcagtc caggcagca ctatttacct tgataaata atatttatta gctggttggg gagctagaac ctggagagct agaacttga gaactagaac ctggagggtt agaacttga gagctagaa ccaagaagg ctgaacctg gagggctag aacctagaga agctaaacc tgagctagaa gctggaggac tagaacctg tagaacctg aggcctgaa tctgaaggc tagaacctg agggctggaa tctggagagc tagaacctg aggcctgaa cctggaggc tagaacctg aaggctaga acctggagg ctggaatctg gagagctaga acctggagg tagaacctg gagggctaga acctagaag gtagaacct ggaggctag aacctggcag gtagaacct agaaggcta gaactggag agccagaac tggaggcta gaactggaa ggcctagaac ctgtagagct agaatagga gagctagaac ccggcaggct agaacctggc agctagaac ctggaggaa tgaacttga ggcctagaac ctggagaatg agaaaattt acatggcaaa gagccataa atctgacca atccactct gaattttaa gaaaagcgt gaaaaaag attcctct taccacca cactctttt tcccaccac cactctctt cactctcagt aagtatctg aggaagaaa cagtgaaag aagaagtaa aacctttag tattagtatt agaataagt caactgtc cacacatgtt gaataaaaa aaaaaaag aggtgtgtt ttgtcacaca gggcagtcac tcagcaccag agcagtgat ggtctgagac tctcttaga gcagagctct gccgaatg ccatgtggg atccacact ggtctgagg gcaactgagt ctgcgggaga agagcggccc tatgcatgtt gtagatgcc tgataaaga catctgtct gtgaaagact caatgagctg ttatgttga aacaggaagc attcacatc caacgagaa aatcatgtaa acatgtgtct ttctgtaga gcataataa tggatgaggt tttgcaaaa aaaaaaaaaa aaa </p>	Homo sapiens
49	635	Beta-1 adrenoceptor	NM_000684	<p> tqmensmgtl rtsisverqi hklqdwagsr q tgctaccgc gccgggctt ctgggtgtt ccccaaccac ggccagccc tgccacccc A ccgcccccg gctcccgag ctcggcatgg gcggggggt gctgtcctg ggcgctccg agccccgtaa cctgtgtctg gccgaccgc tcccagcgg cgcggccacc gcggcgccg tctgtgtgccc cgtgtgccc cccgctcgt tgcctctcc cgccagcga agccccgagc gctgtctca gcagtgaca gcgggcatgg gctgtgctg ggcgtcatc gtgtgtctca tctgtggcgg caatgtgtg gtgatgtgg ccatgcaca gacgcgcgg ctgcagacgc </p>	Homo sapiens

50	635	Beta-1 adrenoceptor	NP_000675.1	<p> taccacacct cttcatcatg tccctggcca ggcgcgacct ggtcatgggg gtgctgggtg tgccgttcgg ggccaccatc gtggtgtggg gccgtggga gacggctcc tctcttcg agctgtggac ctacgtggac gtgctgtgag tgacggccag ctacagagac ctgtgtgtca ttgccctgga ccgtaccctc gccatcacct cgccttcctg ctacagagc ctgctgacgc gcgcggggc gcggggcctc gtgtgacccg tgtgggcat ctgggacctg gtctccttc tgcccatcct catgactggg tggcggggcg agagcgaga ggcgcggcgc tgtacaaag accacaagt ctgcgacttc gtaccaacc gggcctacgc catgcctcgc tccgtagctt ccttctacgt gccctgtgc atcatggcct tctgtacct gcgggtgttc cgcgagggcc agaagcaggt gaagaagatc gacagctgcg agcgcgttt cctggcgccg ccagcgcgcc gcgcctgcc ctgcctcgc cccgtcccg cgcgcgcgc gccgcgcgga ccccgcgcc ccgcgcgcgc cgcgcgcacc gcccgctgg ccaacggggc tgcgggtaag cgcgggacct cgcgcctcgt ggccctacgc gacgaagaag cgtcaagac gctgggcac atcatgggag tcttcacgt ctgtggctg ccttcttc tggccaacct ggtgaagcc ttcacccgag agctgtgcc cgacgcctc ttcgtctct tcaactggct gggctacgc aactcgacct tcaaccccat catctactgc cgcagcccg acttcgcaa ggccttcag gactgctct gctgcgcgcg caggctgcc cgcggcgcc acgcgacca cggagacgcg ccgcgcgcc cggtgtgtct ggccggccc ggaccccg catcgcccg ggcgcctcg gacgacgag acgacgatgt cgtcggggc acgcgcgcgc cgcgcctgct ggagccctgg gccgctga acggcgggc ggcgcgac agcactga cctggacga gccgtgcgc ccggtctcg cctcggaatc caaggtgtg ggcgcgcgc gggcgcgga ctccgggac ggttccag gggaacgag agatctgtgt ttaactaaga ccgataagca gtgaactga agccacaat cctcgtga atcatcgag gcaagagaa aagccagga ccgtgcaca aaaggaaag tttgggaag gatggagag tggctgtct atgtcctt ttg MGLLMALIVL LIVAGNVLVI VAIAKTPRLQ RLIVPASPPA SLIPASESP EPLSQWTAG P WGRWEYGSFF CELWTSVDVL CVTASIELLC VIALDRYLAI TSFTRYQSLL TRARAGLVC TVWAI SALVS FLFILMHWWR AESDEARCY NDPKCCDFVT NRAYALASSV VSFYVPLCIM AFVYLRVERE AQKVKKIDS CERRELGPA RPPSPSPSPV PAPAPPPGP RPAAAATAP LANGRAGRR PSRLVALREQ KALKTLGIIM GVFTLCWLPF FLANVVKAFH RELVDRFLV FENWLGYSNS AFNPIIYCRS PDRKAFQGL LCCARRAARR RHATHGDRPR ASGCLARPGP PSPGASDD DDDVVGATP PARLLEWAG CNGGAAADSD SSLDEPCRP FASESKV actgcgaagc ggctcttca gagcacggc tggaaatggc aggcacgcg agccctagc A accgacaag ctgagtgtgc aggacagtc cccacacac ccacacaca gccgtgaat gaggttcca ggcgtccgct cgcgcgcgc agagcccg cgtgggtccg cccgtgag cgccccagc cagtgccctt acctgccga ctgcgcga tgggcaacc cgggaacg agcgcctct tgcgtgcacc caatagaag catgcgcgc accacagct cagcagcaa agggacaggt tgtgggtggt ggcatgggc atcgtcatgt ctctcatcgt cctggccatc gtgtttggca atgtgctggt catcacagc attgcaagt tgcagcgtct gcagcggtc accaactact tcaacttc actgacctgt gctgacttgc tcatgggctt ggcagtggtg ccctttgggg ccgcccata tcttataa atgtggact ttggcaact ctggcgcgag tttggactt ccattgatgt gctgtgctc acggccagca ttgagacct gtgctgctc </p>	Homo sapiens
51	640	Beta-2 adrenoceptor	NM_000024	<p> taccacacct cttcatcatg tccctggcca ggcgcgacct ggtcatgggg gtgctgggtg tgccgttcgg ggccaccatc gtggtgtggg gccgtggga gacggctcc tctcttcg agctgtggac ctacgtggac gtgctgtgag tgacggccag ctacagagac ctgtgtgtca ttgccctgga ccgtaccctc gccatcacct cgccttcctg ctacagagc ctgctgacgc gcgcggggc gcggggcctc gtgtgacccg tgtgggcat ctgggacctg gtctccttc tgcccatcct catgactggg tggcggggcg agagcgaga ggcgcggcgc tgtacaaag accacaagt ctgcgacttc gtaccaacc gggcctacgc catgcctcgc tccgtagctt ccttctacgt gccctgtgc atcatggcct tctgtacct gcgggtgttc cgcgagggcc agaagcaggt gaagaagatc gacagctgcg agcgcgttt cctggcgccg ccagcgcgcc gcgcctgcc ctgcctcgc cccgtcccg cgcgcgcgc gccgcgcgga ccccgcgcc ccgcgcgcgc cgcgcgcacc gcccgctgg ccaacggggc tgcgggtaag cgcgggacct cgcgcctcgt ggccctacgc gacgaagaag cgtcaagac gctgggcac atcatgggag tcttcacgt ctgtggctg ccttcttc tggccaacct ggtgaagcc ttcacccgag agctgtgcc cgacgcctc ttcgtctct tcaactggct gggctacgc aactcgacct tcaaccccat catctactgc cgcagcccg acttcgcaa ggccttcag gactgctct gctgcgcgcg caggctgcc cgcggcgcc acgcgacca cggagacgcg ccgcgcgcc cggtgtgtct ggccggccc ggaccccg catcgcccg ggcgcctcg gacgacgag acgacgatgt cgtcggggc acgcgcgcgc cgcgcctgct ggagccctgg gccgctga acggcgggc ggcgcgac agcactga cctggacga gccgtgcgc ccggtctcg cctcggaatc caaggtgtg ggcgcgcgc gggcgcgga ctccgggac ggttccag gggaacgag agatctgtgt ttaactaaga ccgataagca gtgaactga agccacaat cctcgtga atcatcgag gcaagagaa aagccagga ccgtgcaca aaaggaaag tttgggaag gatggagag tggctgtct atgtcctt ttg MGLLMALIVL LIVAGNVLVI VAIAKTPRLQ RLIVPASPPA SLIPASESP EPLSQWTAG P WGRWEYGSFF CELWTSVDVL CVTASIELLC VIALDRYLAI TSFTRYQSLL TRARAGLVC TVWAI SALVS FLFILMHWWR AESDEARCY NDPKCCDFVT NRAYALASSV VSFYVPLCIM AFVYLRVERE AQKVKKIDS CERRELGPA RPPSPSPSPV PAPAPPPGP RPAAAATAP LANGRAGRR PSRLVALREQ KALKTLGIIM GVFTLCWLPF FLANVVKAFH RELVDRFLV FENWLGYSNS AFNPIIYCRS PDRKAFQGL LCCARRAARR RHATHGDRPR ASGCLARPGP PSPGASDD DDDVVGATP PARLLEWAG CNGGAAADSD SSLDEPCRP FASESKV actgcgaagc ggctcttca gagcacggc tggaaatggc aggcacgcg agccctagc A accgacaag ctgagtgtgc aggacagtc cccacacac ccacacaca gccgtgaat gaggttcca ggcgtccgct cgcgcgcgc agagcccg cgtgggtccg cccgtgag cgccccagc cagtgccctt acctgccga ctgcgcga tgggcaacc cgggaacg agcgcctct tgcgtgcacc caatagaag catgcgcgc accacagct cagcagcaa agggacaggt tgtgggtggt ggcatgggc atcgtcatgt ctctcatcgt cctggccatc gtgtttggca atgtgctggt catcacagc attgcaagt tgcagcgtct gcagcggtc accaactact tcaacttc actgacctgt gctgacttgc tcatgggctt ggcagtggtg ccctttgggg ccgcccata tcttataa atgtggact ttggcaact ctggcgcgag tttggactt ccattgatgt gctgtgctc acggccagca ttgagacct gtgctgctc </p>	Homo sapiens

52	640	Beta-2 adrenoceptor	NP_000015.1	<p>gcagtggatc gctactttgc cattacttca cctttcaagt accagagcct gctgaccaag aataaggccc gggatgatcat tctgatgggtg tggatttgtt caggccttac ctctctcttg ccattcaga tgcactggta ccgggccacc caccaggaag ccatacaatg ctatgccaat gagacctgct gtacttctt cacaagaacaa gcttatgcca ttgctctctc catcgtgtcc ttctacgttc cctggtgat catggtcttc gtctactcca gggctcttca ggaggccaaa aggcagctcc agaagattga caaatctgag ggcgcttcc atgtccagaa ccttagccag gtggagcagg atggcgagc ggggcatgga ctccgcagat cttccaaagt ctgcttgaag gagcacaaag cctcaagac gttagcctc atcatggga cttccacct ctgctggctg ccctctctca tcgttaacat tgtgcatgtg atccaggata cctcaccct taaggaaagt tacatcctcc taaattggat aggtatgtc aattctggt tcaatcccc tatctactgc cggagcccg atttcaggat tgcctccag gagttctgt gctgcgcag gtctcttttg aaggcctatg ggaatggcta ctccagcaac ggaacacag gggagcagag tggatatcac gtggaacagg agaaagaaa taaactgctg tgtgaagacc tcccaggcac ggaagacttt gtgggccatc aaggtactgt gctagcgt aacattgatt cactcttca aagaagggag gaattgtagt acaatgact cactgctgta agcagtttt tctacttita agaccccc ccccccaac agaacactaa acagactatt taacttgagg gtaataaact tagaataaaa ttgtaaaaat tgtatagaga tatgcagaag gaagggcatc ctctgcctt tttattttt ttaagctgta aaaagagaga aaacttattt gattgattat ttgtatttg tacagttcag tctctcttg catggaattt gtaagtattt gtctaaagag ctttagtctt agaggacctg agtctgctat atttcatga ctttccatg tatctacctc actattcaag tattaggggt aatatattgc tgctggtaat ttgtatctga aggagatttt cttctctaca ccttgaggact tgaggatttt gagtatctcg gacctttcag ctgtgaacat ggaactcttc cccactctc ttattgtctc acacggggtg ttttaggcag ggatttgagg agcagcttca gtgttttcc cgagcaaaag tctaaagttt acagtaaaata aaatgtttga ccatg</p>	Homo sapiens
53	643	Beta-3 adrenoceptor	NM_000025	<p>FERLQVTNY FITSLACADL VMGLAVVPFG AAHILMKMT FGNWCFEFT SIDVLCVTAS IETLCVIAD RYFAITSPFK YQSLLTKNKA RVIILMWIV SGLTSFLPIQ MHWYRATHQE AINCYNETC CDEFTNQAYA IASSIVSYV PLVIMVFVYS RVFOEAKROL QKIDKSEGRF HVQNLSQVEQ DGRTHGLRR SSKFLKEHK ALKTLGIIMG TFTLCWLFFF IVNIHVHIQD NLIRKEVYIL LNWIGYVNSG FNPLYCRSP DFLAFOELL CLRSSLKAY GNGYSSNGNT GEQSGYHVEQ EKENKLLCED LPTEDFVGH QGTVPDND SQRNCSTND SLI</p>	Homo sapiens

643 Beta-3 NP_000016.1 MAPPHENSS LAPWDLPTL APNTANTSGL PGVPWEAALA GALLALAVLA TVGNNLIVIV P
adrenoceptor AIAWTRPLOT MTNVFVTSLA AADIVMGLIV VPPAATLALT GHWPLGATGC ELWTSVDVLC
VTASIEITICA LAVDRXLAVT NPLRYGALVT KRCARTAVLV VVVVSAVSF APIMSQWVRV
GADAEARQCH SNPRCAFS NMPYVLLSS VSFYLPILVM LFVYARFVW ATRQLRLRG
ELGRFPPEFL PPAPRS LAP APVGTCAPE GVPACGRRA RLLPLREHRA LCTGLGLMG
FTLCWLPFFL ANVLRLGPP SLVPGPAFLA LNWLYANSA ENPLIYCRSP DFSAFRLL

55	688	Opsin, blue-sensitive	NM_001708	<p>CRGRRLLPPE PCAAARPALE PSVGPAARSS PAQPRLCQRL DGASWGVs</p> <p>ggcaccatg agaaaatgt cggaggaaga gttttatctg ttcacaaata tctcttcagt A</p> <p>gggcccgtgg gatggccctc agtaccacat tgcccctgtc tggcccttct acctccaggc</p> <p>agctttcatg ggcactgtct tccctatagg gtcccactc aatgccatgt tctgggtggc</p> <p>cacactgcg tacaaaaagt tgcggcagcc cctcaactac attctggtea acgtgtcctt</p> <p>cggaggcttc ctcctctgca tcttctctgt cttccctgtc ttcgtcgcca gctgtaacgg</p> <p>atacttcgtc ttcgggtcgc atgtttgtgc ttggagggc ttcctgggca ctgtagcagg</p> <p>tctggtaca ggatggtcac tggccttccct ggcctttgag cgtacattg tcatctgtaa</p> <p>gcccctggc aactccgct tcagctcaa gcatcacgt accgtggctc tggtacacctg</p> <p>gaccattggt atggcgctc ccatccacc cttctttggc tggagccggt tcatccctga</p> <p>gggcttcgag tgttccctgt gcccgtactg gtacaccgtg ggcaccaa at accgcagcga</p> <p>gtcctatac tggttccctc tcatctctgt cttcattgtg cctctctccc tcatctgctt</p> <p>ctcctacact cagctgctga gggccctgaa agctgttga gctcagcagc aggatcagc</p> <p>tacgaccag aaggtgaac gggaggtgag ccgcatgggt gttgtgatgg taggatcctt</p> <p>ctgtgtctgc tacgtgccct acgcggcctt cgccatgtac atggtcaaca accgtaacca</p> <p>tgggctggac ttacggcttg tcaccattcc ttcattcttc tccaagagt cttgcactca</p> <p>caatcccatc atctactgct tcatgaataa gcagttccaa gcttgcatca tgaagatggt</p> <p>gtgtgggaag gccatgacag atgaatccga cacatgcagc tcccagaaaa cagaagtctc</p> <p>tactgtctcg tctacccaag ttggcccca ctgaggaccc aatattggcc tgtttgcaac</p> <p>agtagaatt aaatttact t</p>	Homo sapiens
56	688	Opsin, blue-sensitive	NP_001699.1	<p>MRKMSSEEFY LFNISVGP WDGQYHIAP VWAFYLAQAF MGTVELIGFP LNAMVLVATL P</p> <p>RYKLRQLN YILNVSVFG FLICFSVFP VFVASCNGYF VFGRHVCALE GFLGTVAGLV</p> <p>TGWSLAFIAF ERYIVICKPF GNFRSSKHA LTVVLATWTI GIGVSIPIPF GWSRFIPEGL</p> <p>QCSCGPDWYT VGTKYRSESY TWFLIFICFI VPLSLICFSY TQLLRALKAV AAQQQESATT</p> <p>QKAEREVSRM VVMVGSFCV CYVPAAFAM YMVNNRNHGL DLRLVTIPSF FSKSACIYNP</p> <p>IIFYCFMKNQF QACIMRMVCG KAMTDESDTC SSQKTEVSTV SSTQVGP</p> <p>gagtatctgg atgtcttga tttctctccc attctgttct gttctgttct cctaatacca A</p> <p>tctcgttact agacgtaggc attggacgtg acaatcaact gcatttgaac tgagaagaag</p> <p>aaatattaaa gacacagtct tcagaagaaa tggctcaaa ggcactcac tcactaatc</p> <p>agactttaat ttcaatcaca aatgacacag aatcatcaag cctctgtggt tctaacgata</p> <p>acacaaataa aggatggagc ggggacaact ctccaggaat agaagcattg tgtgccatct</p> <p>atattactta tgcgtgac atttcagtg gcatccttgg aatgctatt ctcacaaaag</p> <p>tccttttcaa gaccaaacc atgcaaacag ttccaaatat ttctacacc agcctggctt</p> <p>ttggagatct ttacttctg ctaactgtg tgccagtga tgcaactcac taccttgca</p> <p>aaggatggct gttcgaaga attggttga aggtgctctc ttctatccgg ctcacttctg</p> <p>ttggtgtgtc agtgttaca ttaacaattc tcagcgtga cagatacaag gcagttgtga</p> <p>agccacttga ggcagagccc tccaatgcca tctgagac ttgttaaaa gctggctgag</p> <p>tctggatcgt gctatgata ttgtctctac ctgaggtcat atttcaaat gtatacact</p> <p>ttcagagatcc caataaaa atgacattg aatcatgtac cttctatcct gtctctaaga</p> <p>agctcttga agaaatacat tctctgtgt gttctttagt gttctacatt attccactct</p> <p>ctattatctc tgtctactat tcttgattg ctaggacct ttaaaaaagc accctgaaca</p>	Homo sapiens
57	692	Bombesin Receptor Subtype-3	NM_001727		Homo sapiens

Homo
sapiens

NP_001718.1 MAQRQPHSPN QTLISITNDT ESSSSVWSND NTNKGWSGDN SPGEALCAI YITVAVIISV P
GILGNAILLIK VFFTKSMQT VPNIPTISLA FGDLLLLLTC VPVDATHYLA EGMLEFRIGC
KVLSEFIRLTS VGVSVFTLTI LSADRYKAVV KPLERQPSNA ILKTCVKAGC VWIVSMIFAL
PEAIFSNVYT FRDPKNMTE ESCTSYPSVK KLLQEIHSLL CFLVFIYIPL SIISVYISLI
ARTLYKSTLN IPTEQSHAR KQIESRKRIA RTVLVILVLF ALCWLPNHL LYLHSFTSQT
YVDPNMFHFI FTIFSRVIAF SNSCVNPEAL YWLSKSFQKH FKAQLFCKA ERPEPPVADT
SLITLAVMGT VPGTSGSIQMS EISVTSFTGC SVKQAEEDRF

Homo
sapiens

NM_001716 CXC
Chemokine
Receptor 5
gctgccacct ctctagaggc acctggcggg gagctctctca acataagaca gtgaccagtc A
tggtagactca cagcggcagc agccatgaac taccgcctaa cgctggaaat ggacctcgag
aacctggagg acctgtctg ggaactggac agattggaca actataacga cacctccctg
gtgaaaatc atctctgcc tggcacagag gggccctcca tggcctctt caagccctg
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cacgcgtcc atgcctaccg ccacgcgcgc ctctctctca tccatctac ctgtgggacc
atctggctgg tgggttctct ccttgcttg ccagagattc tcttgcgcaa agtcagccaa
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catgcctggt tcaactccc attctctac catgtggcgg gattcctgct gccatgtctg
gtgatgggct ggtgtacgt ggggtagtg cacaggttgc gccaggccca gggcgccct
cagcgcaga agcagtcag ggtggccatc ctggtgacaa gcattcttct cctctgttg
tcacctacc acatcgtcat ctctctggac acctggcgga ggtgaaggc cgtggacaa
acctgcaagc tgaatggctc tctcccgtg gccatcaca tgtgtgagtt cctggcctg
gcccactgct gctcaaccc catgctctac actttgcgcg cgtgaaagt ccgcagtga
ctgtcgggc tctgacgaa gctggctgt accggccctg cctccctgtg ccagctctc
cctagctggc gcaggagcag tctctgtgag tcagagaatg ccactctct caccagttc
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ctccttccaa caggagctgg gatcctaagg gctacccgtg gctaagagt tcctaggagt
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ttctgccggc cctgggcta ggtggagcc caggagcgg aagcagctc aaaggcacag
tgaaggctgt ccttaccat ctgaccccc ctgggctgag agaactcac gcacctcca

58

692

Bombesin
Receptor
Subtype-3

59

729

CXC
Chemokine
Receptor 5

60	729	CXC Chemokine Receptor 5	NP_001707.1	<p> MNYPLTLEMD LENLEDFWE LDRLDNYNDT SLVENHLCPA TEGPLMASFK AVFVPVAYSL P IFLLGVIGNV LVLVILERHR QTRSSTETFL FHLAVADLLL VFILPFVAE GSVGVVLGTF ICKTVIALHK VNFYCSLLL ACIAVDRYLA IVHAVHAYRH RRLSIHITC GTIWLVGELL ALPEILFAKV SQGHNNSLP RCTFSQENQA ETHAWFTSRF LYHVAGFLLP MLVMGWCVYG VVHRLRQAR RPQRQKAVRV AILVTSIFFL CWSPYHIVIF LDTLARKAV DNTCKLNGSL PVAITMCEFL GLAHCCINPM LYTFAGVKFR SDLSRLTLKL GCTGPASLCQ LFPSWRRSSL SESENATSLT TF ggcacgagcc cagaaacaaa gacttcacgg acaaagtccc ttggaaccag agagaagccg A ggatggaaac tccaaacacc acagaggact atgacacgac cacagagttt gactatgggg atgcaactcc gtgccagaag gtgaacgaga gggccctttgg ggcacaaactg ctgccccctc tgtactcctt ggtatttgc atggcctgg ttggaacat cctgggtggtc ctggtccttg tgcaatacaa gaggttaaaa aacatgacca gcatctacct cctgaacctg gccatttctg acctgtctt cctgttcacg ctctccttct aagatcctct ctgggtttta ttacacaggc ttgtacagcg tttttggta tgccatgtgt aagatcctct ctgggtttta ttacacaggc ttgtacagcg agatctttt catcatcctg ctgacgattg acaggtacct ggccatcgtc cagccctgt ttgccttgcg ggcacggacc gtccattttg gtgtcatcac cagcatcatc atttggccc tggccatctt ggcttccatg ccaggcttat acttttccaa gacccaatgg gaattcac accacacctg cagccttcac ttctctcag aagcctacg agagtgaag ctgtttcag </p>	Homo sapiens
61	735	C-C Chemokine Receptor 1	NM_001295	<p> aaaa cctaaaaatt gtttcaaat aaaaaccaa aagatgtctt caaaaaaa aaaaaaaa aaaa </p>	Homo sapiens

62	735	C-C Chemokine Receptor 1	NP_001286.1	<p>ctctgaaact gaacctcttt gggctgggtat tgcctttgtt ggtcatgac atctgtaca caggattat aagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtccgtt tgattttgt catcatgac atctttttt tcttttgag cccctacaat ttgactatac ttattctgt ttccaagac ttctgttca cccatgagt tgagcagag agacattgg acctggctgt gcaagtgaag gaggatgac cctacacga ctgtgtgtc aaccagtga tctaagcctt cgttggtag aggttccgga agtacctgc gacaggctg gagagggtca tggctgtgca cctggttaa tggctccctt tctctccgt ggacaggctg gagagggtca gtccacatc tccctocaca gggagagcat aactctgc tgggtctga ctcagacct aggaggccaa cccaaataa gcaggcgtga cctgccagg acatgagcc agcagcctgg ctctccagc caggttctga ctctggcac agcatggagt cacagccat tgggatagag agggaatga atggtggcct ggggttctg aggttctgg ggttcagtc ttccatga actctcccc tggtagaaa agatgaatg agcaaaaca aaattccag agactggac taagtacc agagaaggc ttggactcaa gcaagattc agattgtga ccttagcat ttgtcaaca agtcacccac ttccactat tcttgaca aaccaataa acccagtagt ggtgactgt ggtccattc aaagttagct cctaagcctt gggagacact gatgatag gaattctgt tcttccatca cctcccccc cccgccacc tcccactgc aagaacttg aaatagtat ttccacagt actccactc ggtccaga gccaatcagt agcagcatc tgcctccct tcactccac cgcagattt ggtctcttg aatctgggg aacatagaac tcatgacga agattgaga cctaacaga aatagaaat ggggaactac tctgggcagt ggaactaaga aagcccttag gaagaattt tatatccat aaatcaaac aatcagga gtgggctaag cacgggccat atgaataca tgggtgctt cttaaaatag ccataaagg gaggactca tcatctcat ttaccctct ttctgacta ttctcagaa tctctctct tttcaagtg ggtgatatgt tggtagattc taatggctt attgcagca ttaataacag gcaaaaggaa gcagggttg tctccctct tttgttct catctaaacc tctgggttt atgggtcaga gttccgactg ccatcttga cttgtcaga aaaaaaaa aaaaa QYKRLKNWTS IYLLNLAISD ATPCQKNER AFGALLPL YSLVFVIGLV GNILVVLV P METPNTTDEY DTTTEFDYGD LFLFLPFW IDYKLDDWV FGDAMCKILS GFYTGLYSE IFFIILLTID RYLAIVHAV ALRARTVTFG VITSIIWAL AILASMPGLY FSKTQWETH HTCSLHPHE SIREWKLFOA LKLNLFGLVL PLLVMICYT GIITLLRRP NEKSKAVRL IFVIMIIFFL FWTPYNLTIL ISVFQDFLT HECEQSRHLD LAVQTEVIA YTHCCVNPVI YAFVGERFRK YLRQLFHRV AVHLVKWLPF LSVDRLEVS STSPSTGEHE LSAGF</p>	Homo sapiens
63	737	C-C Chemokine Receptor 3	NM_001837	<p>ttttctct tctatcacg ggagaagtga aatgacaacc tcactagata cagttgagac A ctttgtacc acatctact atgatgactg gggctgctc tgtgaaaaag ctgataccag agcactgatg gccagttt tgcctccgt gactccctg gtgtccactg tggcctctt gggcaatgtg gtgggtgtga tgatctcat aaatacagg aggtccgaa ttatgacca catctacctg ctcaacctg ccatttcgga cctgtctctc ctgctaccc ttccattctg gatccactat gtcagggggc ataactgggt ttttggccat ggcattgtga agctctctc aggggtttat cacacaggct tgtacagcga gatcttttc ataactctg tgacaatcga caggtacctg gccattgtc atgtgtgtt tgccttcga gcccgactg tcacttttg tgtcatcacc agcatcgtca cctggggcct ggcagtgcta gcagctctc ctgaattat cttctatgag actgaagagt tgttgaga gactcttgc agtctctt acccagagga</p>	Homo sapiens

64	737	C-C Chemokine Receptor 3	NP_001828.1	<p> TTTSLDTVET FGTTSYDDV GLCEKADTR ALMAQFVPL YSLVTVGLL GNVVVMILI P KYRRLRIMTN IYLLNLAISD LLFLVTLFW IHVVRGHNWV FGHGCKLLS GFYHTGLYSE IFFIILLTID RYLAIVHAVF ALRARTVTFG VITSIVTWGL AVLAALPEFI FYETEELFEE TLCALYPED TVYWRHEHT LRMTIFCLVL PLLVMAICYT GIITLLRCP SKKYKAIRL IFVIMAVFEI FWTPYNVAIL LSSYQSILFG NDCERSKHLN LMLVTEVIA YSHCCMNPVI YAFVGERFRK YLRHFFRHL IMHLGRYIPF LPSEKLETS SVSPSTAEPE LSIVF cggggggtttt gatctcttc cctctctttt cttcccttc cttctctt cttctctt cttccctcc A tctctcattt cctctctctt tctctctcag tctccacatt caacattgac aagtccattc agaaaagcaa cctgctcttg gttgggccc gactgcctt gaggagcctg tagagttaa aaatgaacc caggatata gcagatacca cctcgatga agcatatac agcaattaa atctgtatga aagtatccc agccttgca ccaagaagg catcaaggca ttgggggagc tctctctgcc ccaactgtat tctctgtgtt ttgtatttgg tctgcttga aattctgtg tgggtcttgt cctgttcaaa tacaagcgc tcaggtccat gactgatgtg tacctgctca acctgacct ctcggatctg cctctctgtg tttccctcc ttttggggc tactatgcag cagaccagt ggtttttgg ctagtctgt gcaagatgat tctctggatg tacttgggtg gcttttacag tggcatattc ttgtcatgc tcatgagcat tgatagatac ctggcgatag tgcacgcgtt gtttctctg agggcaagg ccttgactta tgggtctac accagtttg ctacatggtc agtggctgtg ttgctctcc tctctgctt tctgttcagc acttgttata ctgagcgcaa ccatacctac tgcaaaacca agtactctct caactccacg acgtggaagg ttctcagctc cctggaaatc aacattctcg gattggtgat cccctaggg atcatgctgt ttgttactc catgatcctc aggaaccttg agcattgtaa aatgagaag agaaacaag cgggtgaagat gatctttgccc ggtgtgttc tctctcttg gttctggaca ccttacaaca tagtgcctt cctagagacc ctggtggagc tagaagtcct tcaggactgc acccttgaaa gatacttga ctatgcctc caggccacag aactctggc tttgttcac tgtgcctta atcccatcat ctacttttt ctgggggaga aattcgcga gtacatccta cagctctca aaacctgcag gggcctttt gtgctctgc aatactgtg gctctccaa atttactctg ctgacacccc cagctcatct tacacgcagt ccaccatga tcatgatctt catgatgctc tgtaggaaaa atgaatggt gaaatgcaga gtcaatgaac ttttccacat tcagagctta ctttaaaatt ggtattttta ggtaagagat ccctgagcca gtgtcaggag gaaggcttac acccacagt gaaagacagc ttctcatcct gcaggcagct ttttctctc cactagacaa </p>	Homo sapiens
65	738	C-C Chemokine Receptor 4	NM_005508	<p> cggggggtttt gatctcttc cctctctttt cttcccttc tttctctt cttctctt cttccctcc A tctctcattt cctctctctt tctctctcag tctccacatt caacattgac aagtccattc agaaaagcaa cctgctcttg gttgggccc gactgcctt gaggagcctg tagagttaa aaatgaacc caggatata gcagatacca cctcgatga agcatatac agcaattaa atctgtatga aagtatccc agccttgca ccaagaagg catcaaggca ttgggggagc tctctctgcc ccaactgtat tctctgtgtt ttgtatttgg tctgcttga aattctgtg tgggtcttgt cctgttcaaa tacaagcgc tcaggtccat gactgatgtg tacctgctca acctgacct ctcggatctg cctctctgtg tttccctcc ttttggggc tactatgcag cagaccagt ggtttttgg ctagtctgt gcaagatgat tctctggatg tacttgggtg gcttttacag tggcatattc ttgtcatgc tcatgagcat tgatagatac ctggcgatag tgcacgcgtt gtttctctg agggcaagg ccttgactta tgggtctac accagtttg ctacatggtc agtggctgtg ttgctctcc tctctgctt tctgttcagc acttgttata ctgagcgcaa ccatacctac tgcaaaacca agtactctct caactccacg acgtggaagg ttctcagctc cctggaaatc aacattctcg gattggtgat cccctaggg atcatgctgt ttgttactc catgatcctc aggaaccttg agcattgtaa aatgagaag agaaacaag cgggtgaagat gatctttgccc ggtgtgttc tctctcttg gttctggaca ccttacaaca tagtgcctt cctagagacc ctggtggagc tagaagtcct tcaggactgc acccttgaaa gatacttga ctatgcctc caggccacag aactctggc tttgttcac tgtgcctta atcccatcat ctacttttt ctgggggaga aattcgcga gtacatccta cagctctca aaacctgcag gggcctttt gtgctctgc aatactgtg gctctccaa atttactctg ctgacacccc cagctcatct tacacgcagt ccaccatga tcatgatctt catgatgctc tgtaggaaaa atgaatggt gaaatgcaga gtcaatgaac ttttccacat tcagagctta ctttaaaatt ggtattttta ggtaagagat ccctgagcca gtgtcaggag gaaggcttac acccacagt gaaagacagc ttctcatcct gcaggcagct ttttctctc cactagacaa </p>	Homo sapiens

66	738	C-C Chemokine Receptor 4	NP_005499.1	gtccagcctg gcaagggttc acctgggctg aggcacacct cctcacacca ggcttgcttg caggcatgag tcagtctgat gagaactctg agcagtctt gaatgaagtt taggtaata ttgcaaggca aagactattc cctctaacc tgaactgatg ggtttctcca gaggaatg cagagtactg gctgtaggag taaatcgcta cctttgctg tggcaaatgg gccccc MNPDIADTT LDESISYNY LYESIPKPT KEGIKAFGEL FLPLYSLVF VFGLLGNSV P VIVLFYKRL RSMTDVYLN LAISDLLFV SLFPWGYAA DQWVFGGLGC KMISWMLVG FYSGIFFVWL MSIDRYLAIV HAVFSRLART LTYGVITSLA TWSVAFASL PGFLFSTCYT ERNHTYCKTK YSLNSTTWKV LSSLEINILG LVPLGLMFL CYSMIIRTLO HCKNEKNKA VKMIFAVVVL FLGFWTPYNI VLFLETIVEL EVLQDCTFER YLDYAIQATE TLAFFVHCCLN PIIYFFELGEK FRKYILQLEK TCRGLFVLQ YCGLIQIYSA DTPSSSYTOS TMDHDLHDAL Homo sapiens
67	741	C-C Chemokine Receptor 7	NM_001838	gtgagacagg gtagtgcca ggcggggcac agccttcttg tgtggtttta cgcgccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct cctgtctatt ttccaggatg gcctgtgcca agatgaggtc acggacgatt acatcgagga caacaccaca gtggactaca ctttgttcca gtctttgtgc tccaagaagg acgtgcggaa ctttaagcc tggttcctcc ctatcatgta ctccatcatt tgtttcgtgg gctactggg caatgggctg gtcgtgttga cctatatcta ttcaagagg ctcaagacca tgacggatac ctactgctc aacctggcgg tggcagacat cctcttctc ctgaccttc cttctgggc ctacagcgcg gccaaagtcct gggctcttgg tgtccacttt tgaagctca tctttgcca ctacaagatg agcttcttca gtggcatgct cctaacttct tgcacagca ttgaccgcta cgtggccatc gtccaggctg tctcagctca ccgccacctg gcccgctgc ttctcatcag caactgtcc tgtgtgggca tctggatact agccacagtg cctccatcc cagactcct gtacagtgc ctccagagga gcagcagta gcaagcagtg cgatgctctc tcatacaga gcattgtggag gcctttatca ccaccagggt ggccagatg gtgatcggct tctggttccc cctgctggcc atgagcttct gttaccttgt cateatccg acctgctcc aggcacgcaa ctttgagcgc aacaaggcca tcaagtgat catcgtgtg gtctggtct tcatagtctt ccagctgcc tacaatgggg tggctctggc ccagacggtg gccaaactca acataccag tagaactgt gagctcagta agcaactcaa catcgctac gactcacct acagctggc ctgctccgc tgctgctca acctttctt gtacgcttc atcggcgtca agttccgcaa cgatctctc aagctcttca aggacctggg ctgcctcagc caggagcagc tccggcagtg gtctcctgt cggcacatcc ggcgtctctc catgagtgtg gagccgaga ccaccaccac cttctccca taggcgactc ttctgcttg actagagga cctctccag ggtccctggg gtgggtag ggagcagatg caatgactca ggacatcccc ccgccaaaag ctgctcaggg aaagcagct ctccctcag agtgcaagcc ctgtccaga agttagcttc acccaatcc cagctacctc aaccaatgcc gaaaagaca gggctgataa gctaacacca gacagacaac actgggaaac agaggctatt gtccctaaa ccaaaactg aaagtgaag tccagaaact gttccacct gctggagtga aggggccaag gaggtgagt gcaaggggag tgggagtggc ctgaagatc ctctgaatga accttctgc ctcccaga ctcaaatgct cagaccagct cttccgaaa ccaggcctta tctccaagac cagagatagt ggggagactt cttggttgg tgaagaaa cggacatcag ctgggtcaaac aaactctctg aacctccc tccatcgttt tcttactgt cctccaagcc agcgggaatg gcagctgcca gcgcgccta aaagcacact catccctca cttgccgcgt cgcctccca ggctctcaac aggggagagt gtggtgtttc ctgcaggcca

Homo
sapiens

P

NP_001829.1

C-C
Chemokine
Receptor 7

68 741

ggccagctgc ctccgcgtga tcaaaagccac actctgggct ccagagtggg gatgacatgc
actcagctct tggctccact gggatggag gagaggacaa gggaaatgtc agggcgggg
agggtgacag tggcgccca aggcacagag ctgttctttt gttctttgtc acagggactg
aaaacctctc ctcatgttct gcttctgatt cgttaagaqa gcaacatttt acccacacac
agataaagt ttccttgag gaaacaacag ctttaaaag
MDLGPMSV LVALLVIFQ VCLQDEVTD DYIGDNTTVD YTLFESLSK KDVRNFKAMF
LPIMYSIICE VGLGNGLV LTYIFKRLK TMTDTYLLML AVADILFLT LPFWAYSAAK
SWFGVHFCK LIFAIYKMSF RSMMLLLCI SIDRYVAIVQ AVSAHRHRAR VLLISKLSCV
GIWILATVLS IPELLYSDLQ RRSSEQAMRC SLITEHVEAF ITIQVAQMWI FLVPLLLAMS
FCYLVIIRTL LQARNFERNK AIKVIIVV VFIVFQLPYN GVVLQATVAN FNITSSTCEL
SKQLNIAYDV TYSIACVRCC VNPFLYAFIG VKFRNDLFKL FKDLGCLSQE QLRQWSSCRH
IRRSMSVEA ETTTTFSP

Homo
sapiens

A

AI733823

C-C
Chemokine
Receptor 8

69 742

TTTAAATTTA AAAACTTTAT TGGATAGCA TGTAGCAGC AGTGAACAGG GCATGGCACA
GAAGGTTTCC AAAACAAGTT TAGCATGAG GATGCCATAT GCTGTGGCCA ACACTAGAA
CAGGTGACT AAGACACAG TTCTGAATGT CCAGCACAAAC CTCTGGCCTG CAACATATGT
CAGTGATGAT AATAACAAG GTGTGACTT GGAAGGAATC CCTATGTCAA GTGAGAAAAA
AAAATGATGT CTGACCTCCT TATATATGTA AAAATATATC CTTACAGATC CGTCAGTAAG
CTGGAAGAAG TGGATGTTGA AGTTTTTAAC ATCGATGATG GGTCTCCAGT TGTTCATCAA
CCCATGGTGA AATAGCTGAA CGGTTCTGAA TCAAAGGTGA TCCTAATAGT GAAGACATTA
ACATTGCAGA AAAAGTGCCT ACAGATTATA TGGTGAATAA ACCTGATGGG CTTCTTGAAG
GACTAGACGA GTGTGTATTC AAGACAGAAC AAGAAATCAC GTCAGTTTAT
TGCCAAATAT GCTGTGGCCA ACACCTAGAA CACAATGACT GGACACACAG TTGTGCGTGC
CTGGCACAAAC CTCCAGCCTG TGTCTATGTT CAGTGATGAT GATGAGCAAG GTGGTGACTT
TGAAGGATTT TGTATATCAA GTGAAAAGAA ATGATATCTG ACCTCCTTAC ATATCTAAAA
CATATACCTT CAAATCCAT CAATAAGCTG AAGAATAAG ATATCAAAGA ATATTTTAAAC
ATCATTAATG AGGTCCAGT TATTCATTCA TTGACCAATG GTAATATAGC TGAATGAT
CTGAATCAAG CTGATTATGA TAATAGTGAT GATGAAGATG ATGTTAATAC TGCAGAAAAA
GTGCCATATA ATGACACAGT GAAAA

Homo
sapiens

A

LG6770

C-C
Chemokine
Receptor 8

70 742

ctccagagag gctgctgctc attgagctgc actcacatga ggatacacag tttgtgaaga
aggaaattggc aacactgaaa cctccagaac aaagctgtc actaaggctc cgctgccttg
atggattata cacttgacct cagtgtaga acagtgcacg actactacta cctgatatac
ttctcaagcc cctgtgatgc ggaacttatt cagacaaaatg gcaagttgct cctgtgctgc
ttttattgcc tccgttttgt attcagctct ctgggaaaaa gcctgggtcat cctggctcct
gtggtctgca agaagctgag gagcatcaca gatgtatacc tcttgaacct ggcctgtctc
gacctgcttt ttgtctctc cttcccttt cagacctact atctgctgga ccagtgggtg
tttgggactg taatgtgcaa agtgggtgct ggcctttatt acattggctt ctacagcagc
atgtttttca tcacctcat gagtgtggac aggtacctgg ctgttgtcca tgcctgtgat
ggcctaagg tgaggacgat caggtgggc acaacgctgt gcttggcagt atggctaacc
gocattatgg ctaccatccc attgttagtg ttttaccagg tggcctctga agatgggtgt
ctacagtggt attcatttta caatcaacag actttgaagt ggaagatctt caccacttc
aaaatgaaca ttttaggctt gtgatccca ttcacatct tttgttctg ctacattaaa

Homo
sapiens

A

NM_005201

C-C
Chemokine
Receptor 8

71 742

72	742	C-C Chemokine Receptor 8	NP_005192.1	<p>atcctgcacc agctgaagag gtgtcaaac ccaacaaga ccaaggccat caggttggtg ctcattgtg tcatgtcat tttactttt tgggtcccat tcaacgtggt tctttcttc acttcttgc acagtatgca catcttggt gtagttagca taagccaaca gctgacttat gccaccatg tcacagaaat catctcttt actcactgt gtgtgaaccc tgttatctat gcttttgtg gggagaagtt caagaacac ctctcagaaa tatttcagaa agttgcagc caaatcttca actacctagg aagacaaatg cctagggaga gctgtgaaaa gtcacatcc tgccagcagc actcctccc tctccagc gtagactaca tttgtgag agaatgaag actaaatata aaaaacttt tcttgaatgg catgctatga gcagttagca aggttgagg tgtgaaggt ttccaaaaa agttcagcat gaagtagcc atatatgtt ttgccaacac ttaaacaaca atgactggag acatagtgt gcatgctcgg cacacatca agcctgtgat tgtgtttat gatgatgtt acaagtggt aactttaaag gattctgtat gccaaagtga aaaaaagat gctgacctc ctccatagc aaaaatata ctccagagac gtccagtagg ctggaagaag tggatatga agtttgaca tcaatgatga ggctccagt gtcattgcat tgactgatg tgaatggct ggaatgattc tgaatcaagg gattgtgat tatagtga atgaagatga tgcattaat actgcataaa aagtcctgt agatgacatg gtgaaatat ttgacaggct tatggaaga ctacagcagc acgcatctag acaaaaacca ttgttgatga ggcagatgcc cagcttataa aatcaaacag agactcttag acaaaaacca ttgttgatga ggcagatgcc tctagaagag acgtttaaaa gccatcaaac acaatgcctc atctccctg gagacccac ttcctgatcc ctcaactgt tctgatgtt ctctcatgt aagaataaa aataaaaaat aaaaaatat atattggtat gtaactacag gaaaaaaa aaaaatatat agtggacagt aacctttcaa tcaaaactca gtatcataag tagagactga aaactgccg ttattgatg ttgttataa cagctgatac aggtattctg ctgatgctac tgctgcctag ttccatgaa cacgttttt cactattaat ggtgctcat atttttact ttaagtlact tacgtgtgag taagtgaag aaaaatgattg ctatcagta gtatcaatga ttactcaat atctgaatca ccttgattca gaaccattc agctgtttca ccatcagta atgaataaca gccctattga tgtcaaaaac ttcaatatcc actcttttca gcctactgta gactctggaa gtatactttt tgcatatgta aggaagtcag atttttttt</p>	Homo sapiens
73	752	CXC Chemokine Receptor 3	NM_001504	<p>MDYTLDSVT TVDYYPDI FSSPCDAELI QTNKLLILAV FYCLLFVFL IGNSLVILVL P VCKLRISIT DYLNLALS DLLEFVFPF QTYLLDQWV FGTVMCKVVS GFYIGFYSS MEFITLMSVD RYLAHVAVY ALKVRTIRMG TTLCLAVLWT AIMATPLLV FYQVASEDGV LQCYSFYNQO TLKWKIFTNF KMNILGLLIP FTIFMFCYIK ILHQLKRCQN HNKTKAIRLV LIWIASLLF WPFNVVLFL TSLHSMHILD GCSISQOLTY ATHVTEIISF THCCVNPVIY AFVGEKFKH ISEIFQKSCS QIFNYLGRQM PRESCSKSS CQOHSRSSH VDYIL</p>	Homo sapiens

74	CXC Chemokine Receptor 3	NP_001495.1	<p>gagccctcct gctggcctgc atcagctttg accgtacct gaacatagtt catgccaccc agctctaccg ccggggggccc ccggcccgccg tgacctgacct cgtcctggct gctggggggc tgtcctgctg tttcgccctc ccagacttca tctctctgc gcccaccac gagagagccc tcaagccac ccaactgcaa tacaactcc cacagtgagg ccgacggct ctcgggtgc tgagctggt ggctggcttt ctctgccc tctgggtcat ggcctactgc tatgccaca tctggcctg gctgctggtt tccaggggcc agcggcgct gggggccatg cggctgggtg tgggtgctgt ggtggccttt gccctctgct ggaccccta tcaactgggt gctggtggtg acatcctcat ggacctggc gcttgggcc gcaactggtg ccgagaaagc aggtagacg tggccaagt ggtaacctca ggcctgggct acatgcactg ctgctcaac ccgctgctct atgctttgt aggggtcaag ttcggggagc ggaatgtggt gctgctctg cgcctggct gcccaacca gagaggctc cagaggcagc catgctctc ccgcccggat tcatcctggt ctgagacctc agaggctcc tactcgggct tgtgaggcgg gaatccgggc tccctttcg cccacagtct gacttcccgc cattccaggc tctcctccc ctcggccggc tctggctctc cccaatctcc tctctcccg gactcactgg cagcccccag accaccaggt ctcggggaa gccacctcc cagctctgag gactgcacca ttgctgctcc ttactgcca agcccatcc tgccgcccga ggtgctgccc tggagcccca ctgcccctt cattggaaa ctaaaactc atcttccca agtgcggga gtaacaggca tggcgtagag ggtgctgccc catgaagcca cagccaggc ctcagctca cagtgactg tggccatggt cccaagacc tctatattg ctcttttatt tttatgtcta aaactcgtt taaaacttt caataaaca gatcgtcagg acaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa</p> <p>1 MVLEVDHQV LNDAAVALL ENFSSDYDG ENESDSCCTS PPCQDFSLN FDRAFLPALY P SLLFLGLLG NGAAVAVLLS RRTALSSSTD FLHLAVADT LLVTLPLWA VDAVQWVFG SGLCKVAGAL FNINFGAL LLACISFDY LNIVATQLY RRGPARVTL TCLAVWGLCL LFALPDEIFL SAHDERLNA THCQYNFPQV GRTALRVQL VAGFLPLLV MAYCYAHILA VLLVSRGQR IRAMRLVVV VVAFALCWTP YHLVVLVDIL MDLGALARNC GRESRVDVAK SVTSGLGVMH CCLNPLLYAF VGVKFRERMW MLLRLGCPN QRLQRPSS SRRDSSWSET SEASYSGL</p>	Homo sapiens
75	CXC Chemokine Receptor 4	NM_003467	<p>gtttgttggc tgcggcagca ggtagcaag tgacgccgag ggctgagtg ctccagtagc A caccgcatct ggagaaccag cggttaccat ggaggggatc agtatataca cttcagataa ctacaccgag gaaatgggct caggggacta tgactccatg aaggaaccct gtttcctga agaaaatgct aatttcaata aaatcttctt gccaccatc tactccatca tcttctaac tggcattgtg ggcaatggat tggctatcct ggtcatgggt taccagaaga aactgagaag catgacggac agtaacaggc tgcactgtc agtggccgac ctctctttg tcatcagct tcccttctgg gcagttgatg ccgtggcaaa ctggtacttt gggaacttcc tatgcaaggc agtccatgtc atctacacag tcaactcta cagcagtgct ctcactcctg ccttcacag tctggaccgc tacttgcca tctgccaagc caccacagt cagagggccaa ggaactgtt ggctgaaaaa gtggctctatg ttggcgtctg gatccctgcc ctcctgctga ctattccga cttcatctt gccaaagtca gtgaggcaga tgacagatat atctgtgacc gcttaccga caatgacttg tgggtggttg tgttccagtt tcagacatc atggttgccc ttactcgc tgggtattgc atctgtcct gctattgcat tatcatctcc aagctgtcac actccaaggg ccaccagaag cgcaaggccc tcaagaccac agtcatctc atcttggtt tcttgccctg</p>	Homo sapiens

76	753	CXC Chemokine Receptor 4	NP_003458.1	<p>ttggctgcct tactacattg ggtacagcat cgactccttc atctcctcgg aaatcatcaa gcaagggtgt gattttgaga acactgtgca caagtggatt tccatcacgg aggccttagc ttcttccac tgttgtctga acccatcct ctatgctttc ctggagcca attttaaac ctctgccag cacgcactca cctctgtgag cagaggttcc agctcaaga tctctccaa aggaagcga ggtgacatt catctgttcc cactgagctc gactttcaa gtttcactc cagtaaac agatgtaaaa gactttttt tatagataa ataatctttt ttttaagtac acattttca gatataaaag actgaccaat attgtacagt ttttattgct tgttggaatt ttgtctgtg tttctttagt tttgtgaag ttaattgac tttattatat aaatttttt tgtttcatat tgaatgtgtg cttagcagga cctgtggcca agttcttagt tgcgtatgt ctcgtgtag gactgtagaa aagggaactg aacattccag agcgttagt gaatcacgta aagctagaaa tgatcccccag ctgtttatgc atagataatc tctccattcc cgtggaactg tttctcgtt cttagacgt gattttgctg tagaagatgg cacttataac caaagcccaa agtgtatag aaatgctggt ttttcagttt tcaggagtgg gttgatttca gcacctacag tgtacagttc tgtattagt tgttaataa agtacaattt aaacttactt agtgttatg tgaacagttc tgaattagt tgaattagt tgaattagt tgaattagt tgaattagt</p>	Homo sapiens
77	755	Complement Component 3a Receptor 1	NM_004054	<p>LVMGYQKKLR SMTDKYRLHL SVADLLFVIT LPFWAVDAVA NWYFGNLFCK AVHYIYTVNL YSSVLIAFI SLDLYLAIVH ATNSQRPRL LAEKVYVGV WIPALLTIP DFIFANVSEA DDRYICDRFY PNDLWVVFQ FQHMVGLIL PGIVLSCYC IISKLHSHK GHQKRLKLT TVILILAFFA CWLPYVIGIS IDSFIILEII KQCEPENTV HKWISITLAL AFFHCCLNPI LYAFLGAKFK TSAQHALTSV SRGSSLKILS KGRGCHSSV STESSSSFH SS</p> <p>atggcgcttt tctctcgtga gaccaattca actgacctc agcttactt ttttactgg attgccaggc ccccagtaa tctctccat tctctccat tctctccat tctctccat tctctccat tctctccat aatggctgg tctgtgggt ggctggcctg aagatgcagc ggacagtga cacaattgg ttctccacc tcacttggc ggactctc tctctcctc tctctcctc tctctcctc tctctcctc cacttggctc tccagggaca gtggcctac ggacgttcc tatgcaagct catccctcc atcattgtcc tcaacatgtt tgccagtgc tctctgcta tgcacattag cctggatgc tgtcttggg tattcaagcc aatctgtgtg cagaatcatc gcaatgtag gatggcctgc tctatctgtg gatgtatctg ggtgtgggt tttgtgatg gacttctgt gttcgtgtac cgggaaatct tcaactacga caaccataat agatgggtc acaatttgg tctctccagc tcattagatt atccagactt ttatggagat ccactagaaa acaggtctct tgaataacatt gttcagccgc ctggagaaat gaatgatagg ttagatcctt cctcttcca acaaatgat catccttggc cagtcctccac tctctccaa cctcaaacat ttcaagacc ttctgcagat tcaactccta ggggttctgc taggttaaca agtcaaaatc tgaattctaa tgaatttaa cctgctgatg tgggtctacc taaaatcccc agtgggttcc ctattgaaga tcacgaaacc agcccaactgg ataatctga tgttttctc tctactcat taaagctgtt ccttagcgt tctagcaatt ccttctacga gtctgagcta ccacaggtt tccagatta ttacaattta ggccaaattca cagatgacga tcaagtcca acacccctcg tggcaataac gatcactagg ctagtgtggg gtttctctgt gccctctgtt atcatgatag cctgtacag cttcattgtc ttccgaatgc aaaggggccg cttcccaag tctcagacga aaactttcg agtggccgtg gtgggtggg ctgtctttct tgtctgctg actccatcc acatttttg agtctgtca ttgcttactg acccagaac tcccttggg aaaactctga tgtcctggga tcatgtatgc</p>	Homo sapiens

78	755	Complement Component 3a Receptor 1	NP_004045.1	<p>attgctctag catctgcaa tagttgctt aatcccttc tttatgcct cttggggaaa gatttagga agaaagcaag gcagtcatt cagggaattc tggaggcagc cttcagtgag gagtcacac gttccaccca ctgtccctca acaaatgtca tttcagaaag aatatgtaca actgtgtga</p> <p>TDLISQPMNE PFVILSMVL SLIFLLGLPG NGILVWVAGL KMQRTVNTIW P FLHLTLADLL CCLSLPFLA HLAIQGQWPFY GRFLCKLIFS IIVLNMFAV FLTLAISLDR CLVVEKPIWC QNHRNVGMAC SICGIIWVA FVMCIPVFY REIFTTDMHN RCGYKFGLS SLDYPDFYD PLENRSLENI VQPGEMNDR LDPSSFQNDH HPWTVTTFEQ PTFQRPSPAD SLPRGSARLT SQNLYSNVFK PADVVSPKIP SGFPIEDHET SPLDSDAFL STLKLFPSA SSNSFEYSEL PQGFQDYNL GQFTDDDDQP TPLVAITIR LUVGFLLPSV IMIACYSFIV FRMQGRFAK SQSKTRFVAV VVAVFLVCW TPHYIFGVLS LLTDPETPLG KTLMSWDHVC IALASANS CF NPFLYALLGK DERKKARQSI QGILEAAFSE ELRSTHCPS NNVISERNST TV</p>	Homo sapiens
79	758	Complement Component 5a Receptor 1	NM_001736	<p>agggggagcc caggagacca gaacatgaac tcctcaatt ataccacccc tgattatggg A cactatgatg acaagatata cctggacctc aacacccctg tggataaaac ttctaacacg ctgcgtgttc cagacatcct gcccttggtc atcttgcag tcgtcttctt ggtgggagtg ctgggcaatg cctgtgtgtg ctgggtgacg gcattogagg ccaagcggac cataaatgcc atctgggttc tcaacttggc ggtagccgac ttctctctct gccctggcgt gccatctctg ttcacgtcca ttgtacagca tcaccactgg ccttttggcg gggccgcctg cagcatcctg ccctccctca tcctgtctca catgtacgcc agcatcctgc tcctggccac caccagcgcc gaccgcttc tgctgtgtgt taacccatc tgggtccaga acttccgagg gcccggttg gcctggatcg cctgtgccgt ggcttgggtg ttgacctgc tgcctgacct accctcttc ctgtaccggg tggtcggga ggagtacttt ccaccaagg tgtgtgtg cgtggactac agccaagaca aacggcgga gcagccctg gccatcgctc ggtgtgtctt ggtcttctg tgccctctac tcacgtcac gattgttac acttctatcc tgcctccggac gtggagccgc agggccacgc ggtccacca gacactcaag gtgtgtgtg cagtgtgtgc cagttctctt atcttctgtg tgccctacca ggtgacgggg ataagtatgt ccttcttga gccatcgtea ccacacttcc tgctgtgaa taagctggac tcctgtgtg tctctttgc ctacatcaac tgctgcatca acccatcat ctacgtggtg gccggccagg gcttccagg cagactgcgg aaatccctcc ccagctcct ccggaacgtg ttgactgaag agtccgtggt tagggagagc aagtcattca cgcctccac agtgacact atggccaga agaccaggc agttaggcg acagcctcat gggccactgt ggcccgatgt cccctctctt cccggccatt ctccctctg tttctacttc actttctgtg ggatgtgtt accttagcta actaactct cccatgttg cctgtcttc ccagacttgt cctctcttt ccagggggac tcttctatc ctctctcat tgcaaggta acactctt ctaggagga ccttccacc cccaccccc cccacacac catcttcca tccaggtt ttgaaaaa aacagaaacc cgtgtatctg ggatatctc atatggcaat aggtgtgaac agggaaactca gaatacagc aagtagaag attctcgctt aaaaaatgt attatttta tggcaagtgt gaaaatagt aactggaatc tcaaaagttc tttggacaa aacagaagtc catggagtta tctaagctct tgaagttag ttaatttaa aaagaaaatt aggtgagag cagtggctca gcctgtaat cccagaact tgggaggtta aggtgggtgg atcacctgag gtcaagagt ccagaccagg ctggccagca tggtagaacc</p>	Homo sapiens

80	758	Complement Component 5a Receptor 1	NP_001727.1	<p> cgtctgtac taaaaatatac aaaattaac tgggcatggt agtgggtgccc tgtaatccca gtacttggg aggetgaggt gggagaattg ctggaacctt ggagggtggag gttgtgtgga gccatgctg caccactgca ctctagctg gttgaccgag ggaggtctctg tctcaaaagc aaagcaaaaa caaaaacaaa aacacctaaa aacctgcsag tttgtttgt acttgtttt taaatatgc tttctattt gagatcattg caactcaac acaattgtaa gtaatgatac agaggatct tgtgtacct tcaccagcc tccccaatg gcaacatctt gcaaaactac aatgtagtct cataaccagg atattgacat tgatacagtg aagatacagg acattctcat caccacagg atccccagga tgcaccttc cctccacc caccaccag cagtgtccct aaccctggc aaccaggaa ccactctcca tttctataa ttgttcattt caagaatgtt attcaatgga atcatatagt atgtaacctg ttttgagctt aaaaaaaaa gtatacatga ctttaatgag gaaaataaaa atgaatatg aaaaaaaa ctttagag MNSFNVTTPD YGHYDDKDTL DLNTPVDKTS NTLRVPDILA LVIFAVWFLV GVLGNALVVM P VTAFAKRTI NAIWFINLAV ADFLSCLALP ILFTSIVQHH HWPFGGAACS ILPSLILLNM sapiens YASILLILATI SADRELLVFK PIWQNFRTGA GLAWIACAVA WGLALLLTIP SFLYRVVREE YFPPKVLGV DYSHDKRRER AVAIVRLVLG FLWPLLTILI CYTFILLRTW SRRATRSTKT LKVVAVAS FFIWLPYQV TGIMSFLEP SSPTELLINK LDSLCVSFAY INCCINPIIY VWAGQGFQGR LRKSLPSLIR NVLTESVVR ESKSFTSTV DTMQKQTQAV </p>	Homo sapiens
81	767	Calcitonin Receptor- like Receptor	NM_005795	<p> gcacgaggga acaactctc tctctscagc agagagtgc acctctgct ttaggacct A caagctctgc taactgaatc tcactcta tgcaggatca cattgcaaac ctttcactct sapiens ttcccacctt gcttgggtt aaatctctc tgcggaact cagaaagtaa agttccatcc tgagaatatt tcacaaagaa ttctcttaag agctggagct ggtcttgacc cctggaattt aagaaattct taaagacaat gtcaaatatg atccaagaga aatgttgatt tgaqtctgga gacaatttg catatctgt aataataaaa acccatacta gcctatagaa acaatattt gaataataaa aacctact agcctataga aacaatatt tgaagattg ctaccactaa aaagaaaact actacaact gacaagactg ctgcaaacct caattgggtca ccacaacttg acaaggttg tataaaacaa gattgtaca acttctagt tatgttatac agcatattc ttatgggtt aatgatggag aaaaagtga cctgtattt tctgttctc tgccttttt ttatgattct tttacagca gaattagaag agatcctga ggactcaatt cagtggggag tactagaaa taaatcatg acagctcaat atgaatgta ccaaaagatt atgcaagacc ccattcaaca agcagaaggc gtttactgca acagaacctg ggatggatgg ctcgtctgga acgatgtgc agcaggaact gaatcaatgc agctctgcc tgattacttt caggactttg atccatcaga aaagttaaca aagatcttg accaagatgg aaactgggtt agacatccag caagcaacag aacatggaca aattatccc agtgaatgt taacaccac gagaaagtga agactgcact aaattgttt tacttgacca taattggaca cggattgtct attgcatcac tgcttatctc gcttggcata ttttttatt tcaagacct aagtggcaa aggtatcact tacacaaaa tctgtctctc tcattgttt gtaactctgt tgtaacaatc attcacctca ctgcagtggc caacaaccag gccttagtag ccacaaatcc tgttagttgc aaagtgtccc agtcattca tctttacctg atgggctgta attactttg gatgtctgt gaagcattt acctacacac actcatgtg gtggcgtgt ttgcagagaa gcaacattta atgtgtatt atctcttgg ctgggattt ccactgattc ctgctgtat acatgccatt gctagaagct tatattacaa tgacaattgc tggatcagtt ctgataccca tctctctac attatccatg </p>	Homo sapiens

82	767	Calcitonin Receptor-like Receptor	NP_005786.1	MEKKCTLYFL VLLPFEMILV TAELEESPED SIQLGVTRNK IMTAQVECYQ KIMODPIQQA P EGVYCNRTWD GWLCWMDVAA GTESMQLCPD YFQDFDSEK VTKICDQDGN WFRHPASNRT WTNYTCQNVN THEKVKTALN LFYLTIGHG LSIASLLISL GIFFYFKSL S CQRITLHKNL FESFVCNSV TIHLTAVAN NQALVATNPV SKVSOFIHL YLMGCNYFWM LCEGIYHLTL IWWAVFAEKQ HLMWYVFLGW GFPLIPACIH AIARSLYND NCWISSDTHL LYIINGPICA ALLVNLFFLL NIVRVLITKL KVTHQAESNL YMKAVRATLI LVPLLGIEFV LIPWRPEGKI AEEVYDYIMH ILMHFQGLLV STIFCFNGE VQAILRRNWN QYKIQFGNSF SNSEALRSAS YTVSTISDGP GYSHDCPSEH INKSIHDIE NVLLKPENLY N ggggactacg gagagctctg caggggagccg agggccccgc ccgggcccaag ggagcttctg A tcccaggagc caggggatgc gaagggatg cccctctggtg gtcactttct cagtcatttt gagctcagcc taatcaaga ctgaggttat gaagtgcgtc ctgagtgcc ttgcagatac cactctcgc accatcacca ctgacctcct gtagctgggc tcaatgaca ttcagtacga agacatcaaa ggtgacatgg catccaaatt aggtgacttc ccacagaaat tcccttaac ttccttttagg ggaagtccct tccaagagaa gatgactgag ggagacaacc cccagctagt	Homo sapiens
83	832	Cannabinoid Receptor 1	NM_001840	aatagagctc ggaatgct aacatcaact tttctgagct ggtgtaagcc agttccagca caccattgat gaattcaaac aaatggctgt aaactaaac atactgtttg gcatgagct taccattatt cscoccaaga gacctagcta aggtctataa acatgaaggg aaattagct tttagtttta aaactcttta tcccatcttg attggggcag ttgacttttt tttttccca gagtgcctga gtcctttttg taactacctt ctcaaatgga caatccaga agtgaattat cctgtctggc tttctttctt ctatgaaaag caactgagta caattgttat gatctactca ttgtgtgaca catcagttat atcttggtgc ataccattg tggaaactgg atgaacagga tgtataatat gcaactctac ttctatatca ttaggaaaac atcttagttg atgtacaaaa acactttgtc aaactcttcc tgtctacca aacagtggga gggaattcct agctgtaaat ataaattttg ccttcccttc tctactgtat aaacaaatta gcaatcattt tatataaga aaatcaatga aggatttctt atcttcttgg aatttggtaa aaagaaattg tgaaaaatga gcttgtaaat actccattat tttattttat agtctcaaat caaatacata caacctatgt aatttttaa gcaatatat aatgcaacaa tgtgtgtatg ttaatatctg atactgtatc tgggctgatt ttttaataa aatagagctc ggaatgct	Homo sapiens

84	832	Cannabinoid Receptor 1	NP_001831.1	<p> ccagcagac caggtgaaca ttacagaatt ttacaacaag tctctctcgt ccttcaagga gaatgaggag aacatccagt gtgggagaa ctteatggag atagagtgtt tcatgttcct gaacccagc cagcagctgg ccattgcagt cctgtccctc acgtgggcca ccttcacggt cctggagaac ctctcgtgtc tgtcgttcac cctccactcc cgcagcctcc gctgcaggcc ttcttaccac ttcatcgga cctcggcggt ggcagacctc ctggggagtg tcatttttgt ctacagcttc attgaacttc acgtgttcca ccgcaaaagt agccgcaacg tgtttctgtt caaatgggtt ggggtcacgg cctccttcac tgcctccgtg ggcagcctgt tcttcacagc catcgacag tacatatcca ttacagggc cctggcctat agaggatgtg tcaccaggcc caaggccgtg gtgggtttt cctgatgtg gacctatgac attgtgatcg ccgtgtgccc tctcctgggc tggaaactcg aaaaactgca atctgtttgc tcagacattt tcccacacat tgatgaacc tacctgatgt tctggatcgg ggtcaccagg gtaactgttc tgttcatcgt gtatgcgtac atgtatattc tctggaaggc tcacagccac gccgtccgca tgattcagcg tggcaccag aagagcatca tcatccacac gctcaggat ggaaggtac agtgaccgcg gccagaccac gccgcgatg acattaggtt agccaagacc ctggtcctga tctcgtgtgt gttgatcacc tctcgtgggc cctcgtttgc aatcattggt tatgatgtct ttgggaagat gaacaagctc attaagacgg tgtttgcatt ctgcagtatg ctctgcctgc tgaactccac cgtgaacccc atcatctatg ctctgaggag taaggacctg cgacacgctt tccggagcat gttccctct tgtgaaggca ctgcgacgc tctggataac agcatggggg actcggactg cctgcacaaa cagcaaaa atgcagccag tttcacagg gccgcagaaa gctgcacaa gagcaggtc aagattgcca aggtaacctat gctgtgtcc acagacacgt ctgcgaggc tctgtgagcc tgatgcctcc ctggcagcac aggaagaaa tttttttt taagctcaaa atctagaaga gtcattgtc tcttgggta tatttttta actttaccat gctcaatgaa aagtgattg ccacatgca cttattgtc tagtttccgt ttgggctaact ctccgggggt tcgtaggaaa ccttt </p>	Homo sapiens
85	833	Cannabinoid Receptor 2	NM_001841	<p> KMTAGDNFQL VPADQVNITE FYNKLSSEFK ENEENIQCE NFMDECFMV LNPSQOLAIA VLSLTGTFV VLENLVLV ILHRSRLCR PSYHFIGSLA VADLIGSVIF VYSFIDFHFV HRKDSRNVEL FKLGVTASF TASVGSILFT AIDRYSIHR PLAYKRIVTR PKAVVAFCLM WTIAIVIAVL PLLGMNCEKL QSVCSDFPH IDETYLMFWI GVTSVLLLFY VYAYMILWK AHSHAVRMIQ RGTQKSIH TSEDGKVQVT RPDQARMDIR LAKTLVLILV VLIICWGPLL AIMYDVFGK MNKLIKTFEA FCSMLCLNS TVNPIYALR SKDLRAFRS MFPSCEGTAQ PLDNSMGDSD CLHKHANNA SVHRAESCI KSTVKIAKVT MSVSTDTSAE AL caggtcctgg gagaggacag aaaaactg gactctcag ccccggcag ctcccagtc A ccagccacc acaacacac ccaagcctt ctagacaagc tcatgggaat ctgaagggcc caccceatgg aggaatgctg ggtgacagag atagccaatg gctccaagga tggcttgat tccaaacctg tgaaggatta catgacctg agtggctccc agaagacagc tgttctgtg ttgtgactc ttctggcct gctaagtgc ctggagaacg tggtgtgtct ctatctgac ctgtcctccc accaactccg ccggaagccc tcatacctgt tcatggcag ctggctggg gctgacttc tggccagtgt ggtctttgca tgcagtttg tgaattcca tgttttccat ggtgtggatt ccaaggctgt ctctcgtctg aagattggca gcgtgactat gaccttaca gcctctgtgg gtacccctct gctgacgcgc attgaccgat acctctgctt gcgtatcca </p>	Homo sapiens

86	833	Cannabinoid Receptor 2	NP_001832.1	MEECWTEIA	NGSKDGLDSN	PMKDYMLSG	PQKTAVAVLC	TLGLLSALE	NVAVLYLILS	P
				SHQLRRKPSY	LFIGSLAGAD	FLASVVFACS	FVNHFVHGV	DSKAVFLKLI	GSTMFTFTAS	
				VGSLLITLAI	D RYLCRLYPPS	YKALLTRGRA	LVTLIGIMVVL	SALVSYLPLM	GMTCCPRPCS	
				ELFLPIPNDY	LLSWLLFI	AF LFSGIITYG	HVLMKAHQHV	ASLSGHQDRQ	VPGMARMLRD	
				VRLAKTILGLV	LAVLLICWFP	VLALMAHSLA	TTLSQVKKKA	FAFCSMLCLI	NSWVNPVLYA	
				LRSGEIRSSA	HCLAHWKKC	VRLGSEAKE	EAPRSSVTET	EADGKITPWP	DSRDLDSLDC	
				agcctgtgga	gacggagacag	ccctgtccca	ctcactcttt	ccctgtccgc	tcctgcggcg	A
				agctcccaac	atggggaggcc	gcgtctttct	cgcattctgt	gtctggtctga	ctctgcgggg	
				agctgaacc	caggactcca	ggggctgtgc	ccgtggtgtc	ctcagaact	ctcgtgtgt	
				caatgccacc	gcctgtcgt	gcaatccagg	gttcagctct	ttttctgaga	tcataccacc	
				cccgacggag	actgtgcagc	acatacaaga	gtgtgcaaca	cgcctgaaag	tgctatgggg	
				aaaaattctcg	gactgtcgtga	acacagaggg	gaatcacgag	tgctgtgtga	gcccgggata	
				tgagcctgtt	tctggggcaa	aaacattcaa	gaatgagagc	gagaaacact	gtcaagatgt	
				ggacgagctgc	agctccgggc	agcatcagtg	tgacagctcc	accgtctgtc	tcacaacogt	
				gggttcatac	agctgcgct	gcccccagg	ctggaagccc	agacacggaa	tcocgaataa	
				ccaaaaggac	actgtctgtg	aagatatgac	ttttccacc	tggaacccgc	ccctggaggt	
				ccacagccag	acgctttccc	gattcttcta	caaatccaga	tgctatcaaa	ttggtggatg	
				gacaagtcca	gccgaggtca	ccatccagaa	ttgctggaag	gtcgtgggga	gagactccaa	
				agctcctgga	gacgtagagg	ccctggcgcc	accgtccgg	cacctcatag	caaccagat	
				gtctctcaac	cttgaagata	tcatgaggat	cctggccaag	agcctgccta	aggccctt	
87	922	Leukocyte Antigen CD97	NM_001784							
				ccttctata	aagctctgt	caccgtgga	agggcactgg	tgaccctggg	catcatgtgg	
				gtcctctcag	cactagtctc	ctacctgcc	ctcatgggat	ggacttggct	tcaccaggcc	
				tgctctgagc	ttttccact	gatcccaat	gactacctgc	tgacttggct	cctgttcatc	
				gccttctct	tttccggaat	catctacac	tatgggcagc	ttctctgaaa	ggcccatcag	
				catgtgccca	gcttctctgg	ccaccaggac	aggcaggtgc	caggaatggc	cgaatagagg	
				ctggatgtga	ggttgggcaa	gacctaggg	ctagtgttg	ctgtgtctct	catctgttgg	
				ttcccaagtc	tgccctcat	ggccacagc	ctggccacta	cgtctcagtg	ccagggtcaag	
				aaggcctttg	ctttctgtc	catgtgtgc	ctcatcaat	ccatggtcaa	ccctgtcatc	
				tatgtcttac	ggagtggaga	gactcgtcc	ctgcccact	atgctgggc	tcactggaag	
				aagtgtgtga	ggggccttgg	gtcagaggca	aaagaagaag	cccgcagatc	ctcagtcacc	
				gagacagagg	ctgatgggaa	aatcaactcg	tgccagatt	ccagagatct	agacctctct	
				gattgtgat	gagcctctt	cccaatttaa	acaactcaag	tcagaaata	gttcaactcc	
				tggaagagag	agagggtct	tggcactctc	ttctactta	aaccagtccc	agacacctag	
				acacggacc	cttttctgt	atgagtgtg	ggactgactc	ctggaagaca	gcttggcctt	
				gcccactgc	acactgtctg	ttgataggt	aggccacga	ggagtacga	gcttagggag	
				acacaaaaag	gcctgggaca	gggtcagtac	aagtcaggac	aggcttcatg	ctgtcatctc	
				ccagagacca	ccaggagcca	aagcagcct	caggcccgag	caatgaggga	cttgggagaa	
				atctgagaag	aatgggttgt	ttctctggga	agtcagggtg	tcagatggga	tggaatccca	
				ggtctctct	ctgctcaatt	gtcaaggcct	ccttggctct	ggagctatga	aaggcccccac	
				tttcaagtca	cccttggcac	tgaggaccga	ggactatgct	atgatgagg	tttaagggtgt	
				gacttgcctc	tttcagagat	aaatgacaag	ccttca			

88	922	Leukocyte Antigen CD97	NP_001775.1	MGRVFLAFC WMLTLPAGT QDSRGARWC PQNSSCVNAT ACRCNPGFSS FSEIITPTE P TCDDINECAT PSKVSCGKFS DWNTEGSYD CVCSPGYEPV SGAKTFKNES ENTQDVDEC SSGOHQCDSS TVCFNTVGSY SCRCRPGWK RRGIPNNQKD TVCEDMTFST WTPPGVHSQ TLRFFDKVQ DLGRDSKTS ABEVIQNVIK LVDELMEAPG DVEALAPPVR HLIATQLLSN LEDIMRILAK SLPKGPFTYI SPSNTELTIM IQERGDKNVT MGQSSARMKL NWAVAAGAE PGPAVAGILS IQNMTTLLAN ASLNLHSHKKQ AELEIYESS IRGVQLRRLS AVNSIFLSHN	Homo sapiens
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89	941	EMR1 Hormone NM_001974 Receptor	NTKELNSPIL FAFSHLESSD GEAGRDPPAK DVMPGRQEL LCAFWKSDSD RGGHWATEVC QVLGSKNGST TCQCSHLSSE TILMAHYDVE DWKLTILITRV GLALSFLCLL LCILFTLLVR PIQGSRTTIH LHLCLCLFVG STIFLAGIEN EGGQVGLRRC LVAGLLHYCF LAACFWMSLE GLELYFLVVR VFQOGLSTR WLCLIGYGVV LLIVGVSAAL YSKGYGRPRY CWLDFEQGFL WSFLGPVTFI ILCNAVIFVT TWKLTQKFS EINPDKMLK KARALTITAI AQLFLLGCTW VFGLFIFDDR SLVLTIVFTI LNCLOGAFLY LHLCLINKKV REEYRKWACL VAGGSKYSEF TSTTSCTGHN QTRALRASES GI	Homo sapiens
			ctaaagtgtt ttctcttgaa tgacagaact acagcataat gcgtggcttc aacctgtcc A tctctgggg atgtgtgtt atgcacagct gggaagggga cataagacc acacggaaac caaacacaaa gggtaataac tgtagagaca gtacctgtg cccagcttat gccacctgca ccaatcaggt ggacagttac tattgcactt gcaacaagg ctctctgtcc agcaatgggc aaatcactt caaggatcca ggagtgcgat gcaagatat tgatgaatgt tctcaagcc ccagccctg tggctctaac tcactctgca aaacctgtc agggaggtac aagtgcagct gtttagatgg ttctcttct cccactggaa atgactgggt cccaggaag cgggcaatt tctctgtac tgatatcaat gagtgcctca ccagcagggt ctgacctgag cattctgact gtgtcaactc catgggaagc tacagttgca gctgtcaagt tggattcatc tctagaaact ccacctgtga agcgtgaat gaatgtgag atccaagagc ttgccagag catgcaactt gtaatacac tgttgaaac tactctgtt tctgcaacc aggtattgaa tccagcagtg gccacttgag ttgccagggt ctcaaacat cgtgtgaaga tatigtatga tgcactgaaa tgtgccccat caattcaaca tgaccaaca ctctctggag ctactttgc acctgccacc ctggcttgc accaagcagt ggacagttga attcacaga ccaaggagtg gaatgtagag atattgtga gtgcgccaa gatccatcaa cctgtgttcc taattctatc tgcaccaatg ccctggctc ctacagctgt ggctgcattg taggttttca tcccaatcca gaagctccc agaaagatgg caacttcagc tgccaagggt ttctctcaa atgtgaaggaa gatgtgatac ccgataataa gcagatccag caatgccaa aggaaccgc agtgaacct gcatatgtct cctttgtgc acaataaat aacatctca gcgttctgga caaagtgtg gaaataaaa cgaccgtagt ttcttgaag aatacaactg agactttgt cctgtgctt aacaaatat ccatgtggac taattcacc aggaagaga cgtctctcct ggccacagtc ttctggaga gtgtggaaag catgacactg gcatctttt ggaaaccctc agcaatgtc actcggctg ttcggcgga atacttagac attgagagca agttatcaa caaagaatgc agtgaagaga atgtgacgtt ggacttgga gccaaagggg ataagatga gatcgggtgt tccacaattg aggaatctga atccacagag accactggtg tggctttgt ctctttgtg ggcattggaat cggttttaa tgagcgttc ttccaagacc accaggtcc ctgaccacc tctgagatca agctgaagat gaattctga gtctgtggg gcataatgac tggagagaag aaagcggct tctcagatcc aatcatctac actctgga acgttcagcc aaagcagaag ttgagagggc ccatctgtgt ttcttgagc actgatgtga aggttggaag atggacatcc ttggctgtg tgatcttga agctctgag acataacca tctgcagctg taatcaatg gcaaatcttg ccgttatcat ggcgtctgg gagtcacga tggactttc cttgtacatc attagccatg taggcattat catctcttg gtgtgctcg tctggccat cggcaacctt ctgtgtgtc gtccatccg aaatcaaac acctactcc acctgacct ctgctgtgtg ctctcttgg cgaagactct ctctctgcc ggtatacaca agactgaca caagcgggc tgcgcatca	

90	EMR1 Hormone NP_001965.1	MRGNLILFW GCVHSHWEG HIRPTRKPT	KGNNCRDSTL CPAYATCTNT VDSYYCTCKQ P	Homo sapiens
941	Receptor	VFGLSSNGQNH FKDPGVRCCK IDECSQSPQ	CGPNSSCKNL SGRYKCSCLD GFSSFTGNDW	
		VPKPGNFSC TDINECLTSR VCPESHSDCN	SMGYSKSCQ VGFISRNSTC EDVNECADPR	
		ACPEHATCNN TVGNYSFCFN PGFESSGHL	SCQGLKASCE DIDECEMCP INSTCNTPG	
		SYFCTCHPGF APSSGQLNFT DQVECRDID	ECRQDPSTCG PNSICTNALG SYSCGIVGF	
		HNPEGSQKD GNFCQQRVLE KCKEDVIPDN	KQIQOQEGT AVKPAYVSFC AQINNIFSVL	
		DKVCENKTV VSLKNTTESF VPVLKQISMW	TKFTKEETSS LATVFLESVE SMTLASFWKP	
		SANVTPAVRA EYLDIESKVI NKECSENV	LDLVAKGDM KIGCSTIEES ESTETTVAF	
		VSVFGMESVL NERFFQDHQA PLTTSEIKLK	MNSRVVGGIM TGEKKDGFSD PIITYLENVQ	
		PKQKFERPIC VSWSTDVKGK RWTSGCVIL	EASETYTICS CNQMANLAVI MASGELTMDF	
		SLYIIISHVG IISLVCLVLA IATFLCRSI	RNHNTYHLHL LCVCLLLAKT LFLAGIHKTD	
		NKTGCAIAG FLHYLFLACF FWMVLEAVIL	FLMVRNLKV NYFSSRNIMK LHICAFGYGL	
		PMLVAVISAS VQPQGYGMHN RCWLNTETGF	IWSFLGPVCT VIVINSILLT WTLWIRQRL	
		SSVNAEVSTL KDTRLITFKA FAQLFILGCS	WVLGIFQIGP VAGVMAYLFT IINSLOGAFI	
		FLIHCLNGQ VREYKRWIT GKTKPSSQSQ	TSRILISSMP SASKTG	
91	G Protein- Coupled Receptor GPR30	NM_001505	ggaaaaacac acctagaggt aggagtgaga	ttcccttctg aggaagaccc A
965			acctctccgc ctggagagcc ggggctggcg	gtgctgaggg acctctcgg cctggacagc
			ccacgcgggc ttggggggcc tcgctctgcc	ctcatggggc ggccatcgggt tccccgaagcg
			gcgagtgaat attcaaatgg ccagtagggg	gcgcactcgg aagtggccgc cccgcgatgag
			gcagttcagc gggcccgaga gtccggggag	ggaggtttat tctcccgctg cagcgactg
			tgaattccgc aacctagc aggagagggc	ggcctggtgg ggaagagcc accaatctt
			ggacggcagg taccacgaga gtgagcagct	ccacggggga ctgtgcagcg tggccgacac

ccgcaggagac gccgcgcgga cgagcacgag gaggccctc gctccacgg atgcaccatg
 ccggtgtgag gagcatctgt tcttcccact ctctgcacat acaaaccca accaaacca
 ccaaggtgc tctctctgg gatttctctg tctgacaaat gccaggctca cttaaggag
 aatacgcctt ctttctaaag atggattcac catttaaac agactcttg gacctttcg
 gcaaatctg aaagtgcac ggcgcagaga catgatgtg acttccaaag cccggggcgt
 ggccctggag atgtacccag gcacgcgca gccctggcc aatggacag gtgagctctc
 gctcaacctg tcccaccgc tccgtggcac cgccctggc cctacacca tcttctctt-
 ggagcaccaag cagtacgtga tggcctgtt cctctcgtg acatcagct tccgcgagaa
 ccccatcgcc ttgtgggca acatctgat cctgtgttg aacatcagct tccgcgagaa
 gatgaccatc cccgacctgt acttcatcaa cctggcgggt gcggacctca tctgtgtggc
 cgactccctc attgaggtgt tcaacctgca cgagcggtac tacgacatcg cgtcctctg
 cacttcatg tctctcttcc tgcaggtcaa catgtacag agcgtcttct tctcaccctg
 gatgagcttc gaccgtaca tgcacctgc caggcccatg cgtgcagcc tgttccgca
 caagcaccac gcccggtga gctgtggcct catctggatg gcctcgtgt cagccacgt
 ggtgcccttc accgcctgc acctgcagca caccgacgag gccgtcttct gtttcggga
 tgtccgggag gtgcagtgc tcgaggtcac gctgggttc atcgtgccct tgcacatcat
 cgccctgtgc tactcctca ttgtccgggt gctgggtcagg gcgcaccggc accgtgggt
 gcggcccccgc cggcagaagg cgtccgcat gatctcgcg gtggtgctgg tcttctcgt
 ctgtgtgctg ccggagaacg tcttcatcag cgtgcacctc ctgcagcggc cgcagcctgg
 ggccgtccc tgcagcagt ctttccgcca tgcaccccc ctcacgggcc acatgtcaa
 cctgcgcgc ttctcaaca gctgcctaaa cccctcac tacagcttct tccggggagac
 cttcagggac aagctgaggc tgtacattga gcagaaaaa aatttgcgg cctgaaacg
 ctctgtcac gctgcctga agccgtcat tccagacagc accgagcgt cggatgtgag
 gttcagcagt gccgtgtaga cagccttggc cgcataggcc cagccagggt gtgactcggg
 agctgcacac acctgggtgg acacaaggca cggccacgtc atgtctctaa actgcggtca
 gatgtggctt ctggtctctc ggggcctcgc gagggtcacg cttgccttgt caccctggg
 ctgtttagga aactcacga ctggtcacct tgcactcttc acacagaatt gctacaatcc
 caaagcgtc gcccgcagg gtccaaaggc cagcgtgtgac cagcctgtca cccagctcct
 cccgcacaac cctgcctgcc gctgcacctg cctgcgcgtg caggaacacat ttgacacgt
 cgaccaggaa agccacacgg agagccact gtgggtgaag cgcctcagtt acacaggaac
 cctaaagcaa atctgccacc gtgggggaac tgacgtctga gatgcaagg gctgtgggt
 ctgagctgga cgtcgcgtg tgtcctctgt gccacgggtc tgagctagct agcgaccgc
 cgagttaaag aggagaagg aacatgctg ctctgtgtga cgcctgagcg tctccatct
 tccaggtgg cagcaatggc gctgtcggc ctcaccaggc ccacgagga cagcagcgt
 cggcccgga cagcaggaag gccctctgt ggagcggccg cctctctctc cgggtgtggt
 cagtcactgc ttgttgacat caacatggca attgactca tgtgactgg gaccgtgcga
 gctgcctgt gggttagtc ggtgccagga caatgaaata ctcacgacac tgtggtgac
 gaattgttt ctacagaaat aacagctgg gacactgag gtgatgatgt aaaaacctc
 ccataaaatg taagaaaagc tgatgaggct ggtgacgttc agcctttgtc aataaacctg
 tcatgtgcgg atcctt

Homo

92 965 G Protein- NP_001496.1 MDVTSQARGV GLEMPGTAQ PAAPNTTSPE LNLSPHLLGT ALANGTGELS EHQQYVIGLF P

93	978	Cholecystoki nin A Receptor	NM_000730	LSCLYTIFLF PIGFVGNIIL IWNISFREK MTIPDIYFIN LAVADLILVA DSLIEVFNLH sapiens
				ERYYDIAVLC TFMSLFIQVN MYSSVFLLTW MSFDYIALA RAMRCSLFRT KHHARLSGGL sapiens
94	978	Cholecystoki nin A Receptor	NP_000721.1	IWMASVSATL VPFTAVHLQH TDEACFCFAD VREQWLEVT LGFIVPFALL GLCYSLIVRV sapiens
				IVRAHRHRL RPRRQRALRM ILAVLVFFV CWLPENVFIS VHLQRTQPG AAPCKQSFRH sapiens
95	978	Cholecystoki nin A Receptor	NM_000730	AHPLTGHIVN LAAFNSCLN PLYISFLGET FRDKLRLYIE QKTNLPALNR FCHAAKAVI sapiens
				PDSTEQSDVR FSSAV sapiens
96	978	Cholecystoki nin A Receptor	NM_000730	ggaatggctg aaaaagccca cacctggaaa tcactccctc cctgtcctc caggcaggt A Homo
				tgcatctcg agacgtctcg gtcattagag gaatggccg ggaatgagca attaccagc sapiens
97	978	Cholecystoki nin A Receptor	NM_000730	tctccagcac ttggtggaaa gcagcaggca aggatggatg tgggtgacag cttcttctg
				aatggaagca acatcacctc tctctgtgaa ctgggctcg aaatgagac gctttctgc
98	978	Cholecystoki nin A Receptor	NM_000730	ttggatcagc cccgtccttc caaagagtg ggcagcggc tgcagattct cttgtactcc
				ttgatattcc tgcacagcgt gctgggaaac acgttggtca tcaccgtgct gattcggaaac
99	978	Cholecystoki nin A Receptor	NM_000730	aagcggatgc ggacgggtcac caacatcttc ctctctccc tggctgtcag cgacctcatg
				ctctgtctct tctgcatgcc gtccaacctc atcccaatc tgcacaagga ttcatcttc
100	978	Cholecystoki nin A Receptor	NM_000730	gggagcggcg ttgtgcaagac caccacctac ttcatgggca cctctgtgag tgtatctacc
				tttaattctg tagccatata tctagagaga tatggtgcga ttgcaaac cttacagtcc
101	978	Cholecystoki nin A Receptor	NM_000730	cggtgtggc agacaaaatc ccattgttg aaggtgattg ctgtacctg gtgcctttcc
				tttaccatca tgactccgta cccatttat agcaacttg tgcctttac caaaaataac
102	978	Cholecystoki nin A Receptor	NM_000730	aaccagaccg cgaatatgtg ccgtttcta ctgccaatg atgttatgca gcagtcctgg
				cacacattcc tgttactcat cctcttctt attctggaa ttgtgatgat ggtggcataat
103	978	Cholecystoki nin A Receptor	NM_000730	ggattaatct ctttgaact ctaccaggga ataaaattt aggtagacca gaagaagtct
				gctaaagaaa ggaacacctag caccaccagc agcgcaaat atgaggacag cgatgggtgt
104	978	Cholecystoki nin A Receptor	NM_000730	tacctgaaa agaccaggcc ccgaggaag ctggagctcc ggcagctgtc caccggcagc
				agcagcaggg ccaaccgat ccggagtaac agctccgag ccaacctgat ggccaagaaa
105	978	Cholecystoki nin A Receptor	NM_000730	agggtgatcc gcatgctcat gtcctctgt gtcctcttct tctgtgctg gatgccatc
				ttcagcgcca acgctctggc ggcctacgac accgctccc gagagcgccg ccttcaggga
106	978	Cholecystoki nin A Receptor	NM_000730	accccaattt ccttcactct cctctgtcc tacacctct cctgctcaa ccccatcatc
				tactgttca tgaacaaaac cttccgctc ggttctatg ccaccttccc ctgctgcccc
107	978	Cholecystoki nin A Receptor	NM_000730	aatcctgttc cccaggggc gagggagag gtggggagag aggaggaag cgggaccaca
				ggagcctctc tgtccaggtt ctctacagc catatagatg cctcggtgcc acccagtgga
108	978	Cholecystoki nin A Receptor	NM_000730	gatgtccctt gacctccac gcgagaagga aggcaggag gaggcagaga agaaagaacg
				gaagaagaga tcaggaagag aaggagcaga gcagagctga tggagaagga aggtccatc
109	978	Cholecystoki nin A Receptor	NM_000730	tccagtggga actctcaag gtctctttc atcttcatc tgattccaga gcactgtcc
				agtggggcca tgattggtt ttaggcagtt caaagcagga tatgttaagt aacctcaac
110	978	Cholecystoki nin A Receptor	NM_000730	catcag sapiens
				MDVVDLSLVN GSNITPCEL GIENETLFL DQPRPSKEWQ PAVQILLYSL IFLSVLGNT P
111	978	Cholecystoki nin A Receptor	NM_000730	LVITVLIRNK RMRTVTNFI LSLAVSDIML CLFCMPFNLI PNLLKDFIFG SAVCKTTYF
				MGTSVSVSTF NLVAISLERY GAICKPLQSR VMQTKSHALK VIAATWCLSF TIMPTPIYS
112	978	Cholecystoki nin A Receptor	NM_000730	NLVPTFKNN QIANMCRFLI PNDVMQSWH TFLLLIFLI PGIVMVVAYG LISLELYQGI
				KFEASQKKA KERKPTSS GKVEDSGCY LQKTRPPRKL ELRLSTGSS SRANIRSN
113	978	Cholecystoki nin A Receptor	NM_000730	SAANLMARKR VIRMLIVIV LFFLCWMPIF SANAWRAYDT ASARLLSGT PISFILLSY

95	1103	Corticotropin releasing factor Receptor 2	<p>TSSCVNPIIY CFMNRFLRG FMATFPCCPN PGPPGARGEV GEEEGGTTG A\$LSRFSYSH</p> <p>MSASVPPQ</p> <p>atggacgcgg cactgtctca cagctgtctg gaggcacact gcagctctgg gctggctgaa A</p> <p>gagctgtctt tggacggctg ggggcaccc ctggaccctg aggtctctca ctctactgc</p> <p>aacacgacct tggaccagat cggaaactgc tggccccgca gcgtgcccgg agccctcgtg</p> <p>gagagccctg gccccagta cttaacggc gtcaagata acacgacccg gaatgcctat</p> <p>cgagaatgct tggagaatgg gacgtgggccc tcaaatgata actactcaca gtgtgagccc</p> <p>atttggatg acaagcagag gaagtatgac ctgcactacc gcactgcctt tgtgtcaac</p> <p>tacctggccc actgcgtatc tgtgtgagcc ctggtggccc ccttctgct ttctctggcc</p> <p>ctgaggagca ttctgtgctt gcggaatgtg attcaactga acctcatcac cactttatc</p> <p>ctgcgaatg tcatgtggtt cctgtgagcc ctggtggccc ccttctgct ttctctggcc</p> <p>gaggtctggt gccactgcat caccaccatc ttcaactact tctgtgtgac caacttcttc</p> <p>tggatgtttg tggaaaggctg ctacctgcac acggccattg tcatgaccta ctceactgag</p> <p>cgctgcgca agtgcctctt cctctctatc ggaatgtgca tcccttccc cateactgctc</p> <p>gcctgggcca tgggcaagct ctactatgag aatgaacagt gctggtttgg caaggagcct</p> <p>ggcgacctgg tggactacat ctaccaaggc cccatcttcc tctgtgtctt gatcaatttc</p> <p>gtatttctgt tcaacatcgt caggatctcta atgacaaagt tacgctgctc caccacatcc</p> <p>gagacaatcc agtacaggaa ggcagtgaag gccaccttgg tgcctctgccc cctctgggccc</p> <p>atcacctaca tgcctctctt cgtcaatccc ggggaggagc acctgtcaca gatcatgttc</p> <p>atctatttca actcttctct gcagctgttc cagggtttct tctgtctctg ctctactgc</p> <p>ttcttcaatg gagaggtgctg ctacgctgtg aggaagaggt ggcacgctg gcaggacct</p> <p>cactccttc gactcccat ggcccggccc atgtccatcc ctacatcacc cacacggatc</p> <p>agcttccaca gatcaagca gacggcctg gtgtgacccc tgggtgccc acctgcacag</p> <p>ctccccctgc ctctctcacc ttctctctct ggttctctg tctgtggcag gctctgtgg</p> <p>ggcaggagat gggaggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc</p> <p>agccaaagggt gactgcaagg gacaggatg agtggggccc accaggctca gcgcaagag</p> <p>aagcagagggt aattcacagg acccctgag aagagccagt cagatgtctg caggeatttg</p> <p>cccatccag ctctctggc cagggcctta ctgggcccag agcagagaag gacctgtcca</p> <p>acacacacag ctatttatag tagcacac agggctcccc tgcctactc atggagccag</p> <p>cagccaggca atggtgtggc ctgcactgg ccttgact ccacactcag tgggtgcccctg</p> <p>cagttgggtg ggttaacgc aagcaagga tcagtgtggc tgccttatcc cagggtgtgc</p> <p>acctagagag gctcactgt acccaccct gtctctgtgt cccctcccc gccatctccc</p> <p>ccgctctggg ggtccatga aggatgcagg ctctcaggcc tggctctctc tcttgggaga</p> <p>ccccctctct gctagtcca cagattaggc aatcaaggaa gacgccatca gggaagccac</p> <p>atccttagtc aaccagtgc atcgtgctgg gcaaatgag gagcagaggc atggagagg</p> <p>gagggcgtgg atgggaatag cagaaccacc atgtcttcag tgattgaac tcatacccca</p> <p>ttggcccttg cctccagtc tccccctcag aaacatctct gctctctgtg aaataacca</p> <p>tgcctcttgg</p>	Homo sapiens
96	1103	Corticotropin releasing factor	<p>MDAALLHSIL</p> <p>ERPCPEYFNG VKYNTTRNAY RECLENGTWA SKINYSQEP ILDDKQRYD LHYRIALVN</p> <p>YLGHCVSVAA LVAAFLLLIA LRSIRCLRNV IHNWLIITFI LRNVWFLLQ LVDHEVHESN</p>	Homo sapiens

97	1240	Receptor 2	Dopamine Receptor D1	NM_000794	<p> EWCHCITTI ENYFVVTNFF WMFVEGCYLH TAIVMYSTE RLKCLFLFI GWCIPFPIIV AWAIKLYE NEQCFGKEP GDLVDYIQG PIIILLINF VLFNIVRL MTKLRASRTS ETIQYKAVK ATLVLPLLG IYMLFFVNP GEDDLSQIMF IYFNSFLQSF QGFFVSVFYC FFNGEVRSAV RKRWRWQDH HSLRVPMAA MSIPSPTRI SFHSIKQTAA V ggctcgctgc ctgcgattgc cacagctcc tgagagctgc cgggcagtcg ctgcggggag A gcgcggggcc ctgctctgta gggctgaagg ccgcgcgagg ttgcgcaagg ctctgggctc tcgaaaggaa gccaaagaaa gaagctgccc aggtgaccag tcctgggagt gctctctccc aaggaagctc cgagcgccca ggagccctta gccggggctt agtgccttt gaacaatctc cagctcttca aggaagtggg ctgcgcgcgc ctctcttggg acctggcctg ggatcccttc cccaaagca ccccgcgat ttttgcgcac cgggagccga acctctgctg cgcgagctg gctgggctca ggcgccttc ctcaacgttt cggagccgtt gccccagcg aagtcacat tccaagctcc agggctttg agagagacga ccccaaggca aggcgtttgg agagctgctg aggagccagg ggcttgagg agcgagaaga catgtatttt cagctgagtc tcagaagggg agaattctct gtcaccacca gaaagcaac agcccggaa tggattgca actgactagc agagcagagg ccagagagtc actggattga tgatttagaa tatgtaaaa agccagtgc ttatttgggg aattcagggg ctttctggtg cccaagacag tgacctgacg atgaggactc tgaacacctc tgccatggac gggactgggc tgggtgtgga gagggacttc tctgttcgta tctcactgc ctgtttctca tgcgtgctca tctgtgctcc gctctgggg aacagctgg tctgtgctgc cgttatcagg ttccgacacc tgcgggtccaa ggtgaccaac ttctttgtca tctcctggc tgttcagat ctcttggtgg cagtcctggt catgcctgg aggcagctgg ctgagattgc tggcttctgg ccttttgggt ccttctgtaa catctgggtg gctttgaca tcatgtctc cactgcctc atcctcaacc tctgtgtgat cagcgtggag aggtattggg ctatctcag cctttccgg tatgagagaa agatgacccc caaggcagcc ttcatctga tcaagtggc atggaccttg tctgtaacta tctctctcat cccagtgcag ctacgtggc acaaggcaaa acccaacag ccctctgatg gaaatgccac ttccctggct gagaccatag acaactgtga ctccagctc agcaggacat atgccaatc atcctctgta ataatcttt acatccctgt ggccatcatg atgtcacct acacaggtat ctacaggatt gctcagaac aaatacggcg cattgcggcc ttggagaggg cagcagtcga cgccaagaat tgcagacca ccacaggtaa tggaaagcct gtcgaatgtt ctcaacggga agttctttt aagatgtcct tcaaaagaga aactaaagtc ctgaagactc tgcggtgat catgggtgtg tttgtgtgct gtgggtacc tttctcatc ttgaactgca ttttgccctt ctgtgggtct ggggagacgc agccctctg cattgattcc aacaccttg acgtgtttgt gtggtttgg tgggctaatt catccttga ccccatcatt tatgccttta atgtgattt tcggaaggca ttttcaacc tcttaggatg ctacagact tgcctgcga cgaataatgc catagagacg gtgagtatca ataacaatgg ggcgcgatg ttttceagc atcatagcc acgagctcc atctcaagg agtgcaatct ggtttacctg atccacatg ctgtgggctc ctctgaggac ctgaaaaagg aggagggcgc tggcatgccc agaccttgg agaagctgct cccagcccta tcggtcatat tggactatga cactgagctc tctctggaga agatccaacc catcacaca aacggtcagc acccaacctg aactcgaga tgaatcctgc cacacatgct catccaaaa gctagaggag attgctctgg ggtttgctat taagaaacta aggtacggtg agactctgag gtgtcaggag agccctctgc tgccttccaa cacacaatta actccgttc caaatcatt ccagtgtatt </p>	Homo sapiens
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127/448

98	1240	Dopamine Receptor D1	NP_000785.1	MRT1NTSAMD GTGLVVERDF SVRIITACFL SLLILSTLLG NTLVCAAVTR FRHLRSKVTN P FFVISLAVSD LLVAVLMPW KAVAEIAGFW PFGSFCNIWV AFDIMCSTAS ILLNLCVISVD RYWAISSPFR YERKMTPKAA FILISVAWTL SVLISFIPVQ LSWHKAKPTS PSDGNATSLA ETIDNCDSSL SRTYAISSV ISFYIPVAIM IVTYTRIYRI AQOIRRIAA LERAAVHAKN CQTTNGNGKP VECSPPESE KMSFKRETKV LKTLVIMGV FVCCWLPFFI LNCILPFCGS GETQPCIDS NTFDFVWFG WANSILNPII YAFNADFERKA FSTLLGCYRL CPATNNAIET VSINNNAAM FSSHHEPRGS ISKECNLVYL IPHAVGSSD LKKEEAAGIA RPLEKLSPAL SVILDYTDV SLEKIQTPIQ NGQHPT	Homo sapiens
99	1241	Dopamine Receptor D5	NM_000798	ggcacagggc agggctgaag ttgggaccgc gcacagaccg cccctgcagt ccagcccgaa A atgtgtccgc caggcagcaa cggcaccgcg taccggggc agttcgctct ataccagcag ctggcgccag ggaacgccgt ggggggctcg gcggggggcac cgcaactggg gccctcacag gtggtcaccg cctgcctgct gaccctactc atcatctgga cccctctggg caactgtctg gtgtggcgag ccctgtgctg gacggccac ctgctgcgca acatgaccaa cgtcttcac gtgtctctgg ccgtgtcaga cctttctgtg gcgtctctgg tcatgcccgt gaaggcagtc gccgaggtgg ccggttactg gcccttttga gcgtctctgg acgtctgggt ggccttcgac atcatgtct ccaactgcctc catctgaac ctgtgcgtca tcagcgtgga ccgtactgg gccatctcca ggcccttccg ctacaagcgc aagatgactc agcgcattgg cttggtcatg gtcggcctgg catggaactt gtccatcctc atctccttca ttccggtcca gctcaactgg cacagggacc agggggcctc ttggggcggg ctggaccctgc caaacaacct ggccaactgg acgccctggg agggagactt ttgggagccc gacgtgaatg cagagaactg tgactccagc ctgaatcgaa cctacgccat cctctcctcg ctcatcagct tctacatccc cgttgccatc atgatcgtga cctacacgag catctaccgc atcgccagg tgcatatccc caggatttcc tccctggaga gggccgcaga gcacgcgag agtgcgcgga gcagcgagc ctgcgcgcc gacacacgcc tgcgcgcttc catcaagaag gagaccaagg ttctcaagac cctgtcgggtg atcatggggg tcttcgtgtg ttgtggctg cctcttctca tcttaactg catgtccct ttctgcagt gacacccctga aggcctccg gccggcttcc cctgggtcag tgagaccacc ttcgacgtct tcgtctggtt cggctgggct aactcctcac tcaacccccg catctatgcc ttcaacgccg actttcagaa ggtgtttgcc cagctgtcgg ggtgcagcca cttctgctcc cgacgcggg tggagacggt gaacatcagc aatgagctga tctctacaa ccaagacatc gtcttcaca aggaatcgc agtgcctac atccacatga tgcccaacgc cgttaccctc ggcaacccgg aggtggaca cgcagaggag gaggtcctt tcgatcgcat gtccagatc	Homo sapiens

100	1241	Dopamine Receptor D5	NP_000789.1	<p> tatacagcgt cccagatgg tgaccctgtt gctgagctgt tctgggagctt ggactgcgag ggggagattt ctttagacaa ataacacct ttcacccga atgatttcca ttaactgca ttaagaaacc cctcatgga tctgcataac cgcacagaca ctgacaagca cgcacacaca cgcaaataca tgcctttcca gtctgctcc ctttatcatg tgttctgtg tagtagctcg tgtgcttaga aacctcaccc cattgattgg tagttcgaag aattggcaga atcagttgca ataaactcag tcaaatgtac ccagcctacc agataggac caacgatacct atgagagaag agagtatggt gctgggtcct taaaaaaaa aatgatacct ggtcctttaa aatatgctc tccctccctt ttttaacaa atggcttgtt cagtoactgg tttgtgtttg attgatttt taaacagcag gttgtgtgtg tgtgcagtga tgtgtggga gcacagcttt cctgggtctg gattcccggt gcttgtgtgt tatgtcattt cttctctctg tgcgtgtggg ggcctcttta ccatagctta agaagtatcc ctgatttatt ctggtgtcta ataacacag attatttga aaaaaaaa aaaaaaaaa aa MLPPGSGNTA YPGQFALYQQ LAQGNVAGGS AGAPPLGPSQ VVTACLTLTL IIWTLGNVL P VCAAIIVRSRH LRANNTNVFI VSLAVSDLEF ALLVMPKAV AEVAGYWPFG AFCDVWVAFD IMCSTASILN LCVISVDRYW AISRFPRYKR KMTQRMALVM VGLAWTSLIL ISFIPVQLNW HRDQASWGG LDLPNLANW TPWEEDFWEF DWNAECDSS LNRTYAISSS LISFYIPVAI MIVTYTRIYR IAQVQIRRI SLEAAEAHQ SCRSSAACAP DTSLRASIKK ETRVLKTLV IMGVFVCCWL PFFILNCMP FCSGHPEGPP AGFPCVSEIT FDVFWFGWA NSSLNPIYA FNADFQKVEA QLLGCSHFCS RTPVETWIS NELISYNQDI VFHKEIAAAY IHMPNNAVTP GNREVDNDEE EGFDRMFQI YQTSPPGDPV AESWELDCE GEISLDKITP FTPNGFH agagcctggc caccagtggt ctccaccgc ctgagtgatc cactgaatct gtctgggtat A gatgatgatc tggagagga gaactggagc cggccttca acgggtcaga cgggaaggcg gacagacccc actacaacta ctatgccaca ctgtccaccc tgctcatcgc tgtcatcgc ttcggcaacg tctgtgtgtg catggtgtgt tcccgagga aggcgtgca gaccacacc aactactga tctgtagcct cgcagtggcc gacctctcg tcgccacact ggtcatgccc tgggtgtgtc acctggaggt ggtagtgag tggaaattca gcaggattca ctgtgacatc ttcgtcactc tggacgtcat gatgtgacg gcgagcatcc tgaattgtg tgccatcagc atcgacaggt acacagctgt ggccatgccc atgctgtaca atacggccta cagctccaa cgccgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttaccat ctctgccc ctcctcttcg gactcaataa cgcagaccag aacgagtga tcaatgccc cccggccttc gtggttact cctccatcgt ctcttctac gtgacctca ttgtaccct gctggtctac atcaagatct acattgtcct ccgacagcg cgaagcgag tcaacacca acgcagcagc cgagcttca gggccacct gaggtctcca ctgaaggga actgtactca cccgaggac atgaaactct gcaccttat catgaagtct aatggaggt tcccagtga caggcggaga gtggagggtg cccggcagc ccaggagctg gagatggaga tgcctccag caccagccc cccgagagga cccgttacag cccatccca cccagcacc accagtgac tctcccagc ccgtccacc atggtctca cagcactccc gacagcccc ccaaacca gaagaatggg catgccaaag accacccaa gattgccaag atctttgaga tccagacct gccaatggc aaaacccgga cctccctca gaccatgagc cgttagaagc tctccagca gaagagaag aaagccactc agatgtcgc cattgtctc ggcgtgtca tcatctgtg gctgcccctc ttcatcacac acatcctgaa catacactgt gactgcaaca tccgcctgt cctgtacagc </p>	Homo sapiens
101	1242	Dopamine Receptor D2	NM_000795	<p> tatacagcgt cccagatgg tgaccctgtt gctgagctgt tctgggagctt ggactgcgag ggggagattt ctttagacaa ataacacct ttcacccga atgatttcca ttaactgca ttaagaaacc cctcatgga tctgcataac cgcacagaca ctgacaagca cgcacacaca cgcaaataca tgcctttcca gtctgctcc ctttatcatg tgttctgtg tagtagctcg tgtgcttaga aacctcaccc cattgattgg tagttcgaag aattggcaga atcagttgca ataaactcag tcaaatgtac ccagcctacc agataggac caacgatacct atgagagaag agagtatggt gctgggtcct taaaaaaaa aatgatacct ggtcctttaa aatatgctc tccctccctt ttttaacaa atggcttgtt cagtoactgg tttgtgtttg attgatttt taaacagcag gttgtgtgtg tgtgcagtga tgtgtggga gcacagcttt cctgggtctg gattcccggt gcttgtgtgt tatgtcattt cttctctctg tgcgtgtggg ggcctcttta ccatagctta agaagtatcc ctgatttatt ctggtgtcta ataacacag attatttga aaaaaaaa aaaaaaaaa aa MLPPGSGNTA YPGQFALYQQ LAQGNVAGGS AGAPPLGPSQ VVTACLTLTL IIWTLGNVL P VCAAIIVRSRH LRANNTNVFI VSLAVSDLEF ALLVMPKAV AEVAGYWPFG AFCDVWVAFD IMCSTASILN LCVISVDRYW AISRFPRYKR KMTQRMALVM VGLAWTSLIL ISFIPVQLNW HRDQASWGG LDLPNLANW TPWEEDFWEF DWNAECDSS LNRTYAISSS LISFYIPVAI MIVTYTRIYR IAQVQIRRI SLEAAEAHQ SCRSSAACAP DTSLRASIKK ETRVLKTLV IMGVFVCCWL PFFILNCMP FCSGHPEGPP AGFPCVSEIT FDVFWFGWA NSSLNPIYA FNADFQKVEA QLLGCSHFCS RTPVETWIS NELISYNQDI VFHKEIAAAY IHMPNNAVTP GNREVDNDEE EGFDRMFQI YQTSPPGDPV AESWELDCE GEISLDKITP FTPNGFH agagcctggc caccagtggt ctccaccgc ctgagtgatc cactgaatct gtctgggtat A gatgatgatc tggagagga gaactggagc cggccttca acgggtcaga cgggaaggcg gacagacccc actacaacta ctatgccaca ctgtccaccc tgctcatcgc tgtcatcgc ttcggcaacg tctgtgtgtg catggtgtgt tcccgagga aggcgtgca gaccacacc aactactga tctgtagcct cgcagtggcc gacctctcg tcgccacact ggtcatgccc tgggtgtgtc acctggaggt ggtagtgag tggaaattca gcaggattca ctgtgacatc ttcgtcactc tggacgtcat gatgtgacg gcgagcatcc tgaattgtg tgccatcagc atcgacaggt acacagctgt ggccatgccc atgctgtaca atacggccta cagctccaa cgccgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttaccat ctctgccc ctcctcttcg gactcaataa cgcagaccag aacgagtga tcaatgccc cccggccttc gtggttact cctccatcgt ctcttctac gtgacctca ttgtaccct gctggtctac atcaagatct acattgtcct ccgacagcg cgaagcgag tcaacacca acgcagcagc cgagcttca gggccacct gaggtctcca ctgaaggga actgtactca cccgaggac atgaaactct gcaccttat catgaagtct aatggaggt tcccagtga caggcggaga gtggagggtg cccggcagc ccaggagctg gagatggaga tgcctccag caccagccc cccgagagga cccgttacag cccatccca cccagcacc accagtgac tctcccagc ccgtccacc atggtctca cagcactccc gacagcccc ccaaacca gaagaatggg catgccaaag accacccaa gattgccaag atctttgaga tccagacct gccaatggc aaaacccgga cctccctca gaccatgagc cgttagaagc tctccagca gaagagaag aaagccactc agatgtcgc cattgtctc ggcgtgtca tcatctgtg gctgcccctc ttcatcacac acatcctgaa catacactgt gactgcaaca tccgcctgt cctgtacagc </p>	Homo sapiens

102	1242	Dopamine Receptor D2	NP_000786.1	<p> gccttcacgt ggtcgggcta tgtcaacagc gccgtgaacc ccataccta caccacctc aacattgagt tccgcaagc cttctgaag atcctccac gctgactctg ctgctgccc gcacagcagc ctgcttccca cctcctgcc cagccgcc cctccacc ttgcgaacg tgacagaaa ggcctgggtg gatcgccctc ctctcttag ccccgccagg cctcgacgtg ttcgcttggc tccatgctcc tcaatgccg cacacctca ctctgccagg gcagtgctag tgagctggc atgtaccag cctgggggtt ggcctcagct caggggcagc tcatagatc cccctccca cctccagtc cctatcctt ggcacaaa atgcagccg cttccttgac cttcctctgg ggtctaggg ttgctggagc ctgagtcagg gccagaggc ttagtttct ctttggggg cttggcgtgg agcagcggtt gggagagagt ggacagttca caccctgea gggccacagg aggcagcaa gctctcttg cgaggagcca ggcaacttca cctctggag acccatgaa ataccagact gcaggttga ccgagagat tcccaagcca aaaccttag ctccctccc caccctgat tggactcta cttccaggc tagtccggac ccactcacc ccgttacgc tcccaagtg gttccacat gctctgaga gaggagcct catctgaag ggccacagg ggtctatgg gagagaaact cttggccta gccaccctg ctgctcttg acggccctgc aatgtatccc ttctcacagc acatctggc cagctgggg cctggcagg aggtcagcc ctggaactct atctggcct ggcctaggga catcagaggt tctttgagg actgctctg ccacactctg acgcaaac accttctt tctattcct ctggccttc ctctctctg ttcccttcc cttccactgc ctctgctta gaggagcca cggtaagag gctgtgaaa accatctggc ctggcctggc cctgcctga ggaaggagg gaagctgcag cttgggagag cccctgggc ctgactctg taacatcact atccgatgca ccaactaat aaactctga cgagcacct tc </p>	Homo sapiens
103	1243	Dopamine Receptor D3	NM_000796	<p> REKALQTTN YLIVSLAVD LLVATLMPW VYLEVVGWV KFSRTHCDF VTLDMVMCTA SILNLCAISI DRYTAVAMP LYNTYSSKR RVTVMISIV VLSFTISCPL LFGLNNADQN ECIIANPAFV VYSSIVSFY PFIVILLVYI KIYIVLRRR KRVTNRSSR AFRAHLRAPL KGNCTHPEDM KLCTVIMKSN GSFPVNRV EAARRAQELE MEMLSSTSP ERTRYSPIPP SHHQLTLPDP SHHGLHSTPD SPAKPEKNG AKDHPXIAKI FEIQTPNGK TRTSLKTMRS RKLQQKEKK ATQMLAIVLG VFIIICWLPFF ITHILNIHCD CNIPPLYSA FTWLGYNVSA VNPIIYTFN IEFKAFLLKI LHC taaagaaaac ggatacattc gaaagcagct atgaacacatg cactaaggctc taatagggaa A gctggaaaaag cagcactcaa gtaatttcac cttagaggca aaatgggtg atttcttct gttcatttca tagtttctga gtcctgagaa aggcgaagt ttgcttgctt gggatgtct gctgtcagta aatggctgca ggagccgaag tggtaaacct ctgggtctcc agaatcaga agaaaatttt aggaagccc ttggcatcac gcacctcct ctgggtatg gcactctga gtcagctgag tagccacctg aactacacct gtgggcaga gaactccaca ggtgccagcc aggccgccc acatgctac tatgcctct cctactgcgc gctcactctg gccatcgtct tcggcaatgg cctggtgagc atggctgagc tgaaggagcg ggccctgcag actaccaca actacttagt agtgagcctg cctgtggcag acttgctggt ggccacctg gtgagccct ggtgtgtata cctggaggtg acagtgagg tctggaattt cagccgcat tctgtgatg ttttgtcac cctggatgct atgatgtga cagccagat ccttaatctc tgtgccatca gcatagcag gtacactgca gtggtcatgc ccgttacta ccagcatggc acgggacaga </p>	Homo sapiens

104	1243	Dopamine Receptor D3	NP_000787.1	<p>gctcctgtcg gcgcgtggcc ctcatgatca cggccgtctg ggtactggcc ttgtctgtgt cctgcccctt tctgttttggc tttatatacca caggggacc cactgtctgc tceatctcca acctgattt tgtcatctac tcttcagtgg tgtctctcta cctgcccctt ggagtgaactg tccttctcta tgccagaatc tatgtgtgic tgaacaaaag gagacggaaa aggatctctca ctcgacagaa cagtcagtgc aacagtgtca ggctgtgctt ccccaacaa accctctctc ctgaccggc acatctggag ctgaagcgtt actacagcat ctgccaggac actgccttgg gtggaccagg cttccaagaa agaggaggag agttgaaaag agaggagaag actcggaatt ccctgagtc caccatagcg cccaagctca gcttagaagt tcgaaaactc agcaatggca gattatgac atctttgaag ctggggcccc tgcaacctgc ggagtgtcca cttcggggaga agaaggcaac ccaaatggtg gccattgtgc ttggggcctt cattgtctgc tggctgccc tcttcttgac ccatgttctc aataccact gccagacatg ccacgtgtcc ccagagcttt acagtgcac gacatggctg ggctacgtga atagcgcct caacctgtg atctatacca ccttcaatat cgagttcccg aaagccttcc tcaagatcct gtctgtctga gggagc MASLSQLSSH INYTCGAENS TGASQARPHA YYALSYCALI LAIVFNGLV VMVTKERAL P QTTNNVLVS LAVADLLVAT LVMPVVVYLE VTGGVWNSR ICCDVFVTL DMCTASILN LCAISIDRYT AVMPVHYQH GTGQSSRRV ALMITAVWVL AFVSCPLL GFNTIGDPTV CSISNPDEVI YSSVVSFYL FGVTVLYAR IYVVLKQRR KRILTRQNSQ CNSVRPGFPQ QTLSPDPAHL ELKRYYSICQ DTALGGPGFQ ERGELKREE KTRNSLSPTI APKLSLEVRK LSNGLRSLTSL KIGPLQPRGV PLREKRATQM VAIVLGAFTV CWLPFFLTHV LNTHCQTCHV SPELYSATW LGVNSALNP VITYTNIEF RKAFLKILSC</p>	Homo sapiens
105	1244	Dopamine Receptor D4	NM_000797	<p>atggggaaac gcagcaccgc ggacgcggac gggctgtctgg ctggcgcgcg gccggcgcg A ggggcatctg cgggggcatac tgcggggctg gctgggcgag gcgcggcgcg gctgtggggg ggcgtgtctg tcatcgcgcg ggtgtctcg gggaaactcg tctgtgtcgt gagegtggcc accgagcgcg ccttcagac gccacacac tcttctatcg tgagccttgc ggccggcgac ctctctctg ctctctctgt gctgcgctc tctgtctact ccgaggtcca ggtgtggcg tggctgtga gcccccgcct gtgcgacgc ctcattggca tggacgtcat gctgtgacc gcttccatct tcaacctgtg gccatcagc tggagacgc cggcagctgc ggcctgtgg ctgcgtaca accggcagg tggagacgc cggcagctgc tgctcatcg gccacgtgg ctgtgtccg cggcggtggc ggcccgcta ctgtgcggc tcaacgacgt gcgcggcgcg gaaccgcgcg tgtgcgcct ggaggaaccg gactacgtgg tctactctc cgtgtgtctc ttcttctac cctgcgcct catgtgtg ctctacttgg ccacgttccg cggcctgcag cgctgggagg tggcagctg cgcaagctg cagggcgcg cgcccgccg acccagcgg cctggccgc cttcccccac gccacccg cgcccttccc cggggtccct gcggccccc gactgtgcg ccccgccg cgcccttccc cggggtccct gcggccccc ctgtgcgccc gctgcgcgc gctccccc ggaccctgc ggcccgact gtgcgccc cgcccgccg ctcccccagg acccctgcgg ccccgactgt ggcgcccc cgcccgccct tccccgggt cctgcggc ccgactgtg gccccccg cccggcctcc cccaggacc ctgcggcccc gactgtgcg ccccgccg cggcctccc cggacacct gcggtccaa ctgtgtctcc ccgacgcg ttagagccg cggctccc cccagacct caccgacag ccgagaggg cggcgtgcca agatcacgg ccgggagcgc aaggccatga gggctcctgc ggtgtgtgtc ggggcccttc tgtgtgtgtg gacgccttc tctgtgtgtg acatcacgca ggcgtgtgt</p>	Homo sapiens

106	1244	Dopamine Receptor D4	NP_000788.1	cctgectgct ccggtccccc gcggtgtgtc agcgcgctca cctggtctgg ctagctcaac agcgccctca acccgctcat ctacactgtc ttcaagccg agttccgcaa cgtcttcgc aaggccctgc gtgctgtgtg ctgagccggg caccgccgg cgcgcccg cctgatggc aggcctcagg gaccaaggag atggggagg cgttttga cgttaattaa acaattcct tccc	Homo sapiens
107	1267	Opioid Receptor, delta 1 (OPRD1)	NM_000911	TERALQPTN SFIVSLAAD ILLALVLPF EYSEVQGA WLLSPRLCDA LMAMDMICT ASIFNLCAIS VDRFVAVP IRYNRQGS RQLLIGATW LLSAAVAAP LCLINDVRGR DPAVCRLEDR DYVYSSVCS FFLPCPMLL LYWATFRGLQ RWEVARRAKL HGRAPRRPSG PGPPSPTPA PRLPQDPCGP DCAPPAPGLP RGPCGPDCAP AAGLPDPDC GPDCAAPPAG LPQDPCGPDG APPAPGLPRG PCGPDCAPPA PGLPQDPCGP DCAPPAPGLP PDCGSNCAP PDAVRAAALP PQTPPQTRR RRAKITGRER KAMRVLVVV GAFLLCWTFE FVWHITQALC PACSVPPRLV SAVTWLGYN SALNPVITY FNAEFNVFR KALRACC ccgaggagcc tgcgtgtctc ctggctcaaca gcgtctccgg cgagagagc gggcgagccg A gggggtgtgg cgggtgcggg cggcgagga ggcgagcag gcgcagagc agcgggggcg ccggggcgcg gcacggcgcg ggtcggggcg ggcctctgcc ttgcgctcc cctcgctcg gatcccgcg ccagcgagc cggtggagag ggcgcgcg gcgcggga gccatggaa cgccccctc cgccggcg cggtgcag cccgctctt cgccaagcc tcggagccct accctagcgc ctccccagc gctggcgcca atgcgtcgg gcgcagga ccggggagcg cctcgtccct cgccctggca atcgccatca ccgctctca ctggccgtg tgcgctgg ggctgtggg caacgtgctt gtcatgttc gcagctccg gtacactaa atgaagcgg ccaccaacat ctacatctc aacctggcct tagcgatgc gctggccacc agcagctgc ctttccagag tgccaagtac ctgatggaga cgtggccctt cggcgagctg ctctgaaag ctgtgtctc catcgactac tacaatatgt tcaccagcat ctteacgctc accatgatga gtgttgaccg ctacatcgct gtctgcacc ctgtcaagg cctggacttc cgacgctg ccaaggcaa gctgatcaac atctgtatct gggctctggc ctacggcgtt ggcgtgcca tcattgtcat ggtgtgacc cgtccccggg acggtgcagt ggtgtcatg ctccagtcc ccagccccag ctggtactgg gacacgtga ccaagatctg cgtgttctc ttgccttcg tggtgccat cctcatc accgtgtgt atggctcat gctgtgctg ctgctgagtg tgccctgct gtccggctcc aaggagaag accgaagcct gcggcgatc acgcgatgg tgctgtgtt tgtggcgcc ttctgtgtg gttggcgcc catccatc ttctcatcg tctggagct ggtggacatc gaccggcg acccgtgtt ggtgtgtg ctgcaacctgt gcatcgct gggctacgcca atagcagcc tcaaccccg gctctacgt ttctcgacg agaaacttcaa gcgtgtctt cgccagctct gccgaagcc ctggggcgcc ccagacccca gcagcttcag cggggcccg gaagccag cccggagcg tgcacgccc tgaccccg ccgatgttcc cggcggtggc cgtgcgctt gaccagcca tccggcccc agaccccc ccttagttgt acccgagc cactagtc ccagtggag gcgagacca tgatgtggag tggggccagt agatagtcg gaggctttg ggaccgag atgggctc tgttctggag acgggaccgg ccgctagat gggcatggg tgggctctg gttggggcg aggcagaga cagatcaatg gcgcagtc tctgtctg gtgccccct ccacggctt aggtggggcg ggaaaagccag tgactccagg agaggagcg gacctgtggc tctacaactg agtcttaa	Homo sapiens

108	1267	Opioid Receptor, delta 1 (OPRD1)	NP_000902.1	cagggcacatc ccaggaaggc ggggcttcaa ccttgagaca gcttcgggtt ctaacttgga gcccgaactt cggagtggtg gggtcggggg ccc MEPAPSAGAE LQPPLEFANAS DAYSAFPPSA LANASGPPGP GSASSIALAI AITALYSAVC P AVGLLGNVLV MFGIVRYTKM KTATNIYIEN GALADALATS TLPQSAKYL METWPFGE CKAVLSIDYY NMFTSIFTLT MMSVDRIYAV CHPVKALDFR TPAKAKLINI CIWVLASGVG VPIMWAVTR PRDGAUVCLM QFPSPSYWD TVTKICVLEF AFVVPILIIIT VCYGLMLLRL RSVRLLSGSK EKDRSIRRIIT RMVLVVVGA FVVCWAPIHIF VIVMTLVDOID RRDELVWZAL HLCIALGYAN SSLNPVLYAF LDENFKRCFR QLCRKPCGRP DPSSFSRPRE ATARERTAC TPSDGPGGGR AA	Homo sapiens
109	1424	Duffy Antigen	NM_002036	gggacctgaac caaacggtgc catgggggaa tgtctgcaca ggttgagtat ggggccaggc A cccagagatcc cttatcccta tgcacctcat tcccctgct gtttgccct cagctcttat atctctctct tttctctctc atcttttctc ccttcccgct ttttctctct tccctcaaaag tcttttctct tctctctctc ctatgctagc ctcttagctc cctcttggtt cctctcccttt gcctttgagt cagttccatc ctggtctctt ggtgcctttc cttctgacct tgcactgctc ctccagcccc agtgcctctg gcttccccag gactgttctt gctccggctc ttcaggctcc ctgctttgct cttttccact gtccgacctg catctgactc ctgcagagac cttgttctcc caccgacct tctctctgt cctccctcc cactgcccc tcaattccca ggagactctt ccggtgtaac tctgatggcc tctctgggt atgtctctca ggcggagctc tccccctcaa ctgagaactc aagtcagctg gacttcgaag atgtatgaa tcttctctat ggtgtgaatg attctctccc agatggagac tatgatgcca acctggaagc agctgcccc tgcactctct gtaacctgct gtagactct gactgacct tcttacttct tcagacctct cttccgtggc cagctctgcc tagctagcag cactgctctc ttcactgctt ttcagacctc cttccgtggc cagctctgcc ctgctctggcc tgtcctggca cagctggctg tgggcagctg cctcttcagc attgtggtgc ccgtcttggc cccagggcta gtagcactc gcagctctgc cctgtgtagc ctgggtact gtgtctgcta tggctcagcc ttgcccagg ctttgctgt aggttgccat gctccctgg gccacagact gggtcaggc caggtcccg tccacctggc cagtggtgct tctggtggac ggggagtggc tgcctactg acactgctg tccacctgca agctttgca ggcacacac actgtagcct tctgacctt gatatacagc acggagctga agctttgca agctttgca ggcacacac actgtagcct gtcttgccat cttgtctctg ttgcatctg gttgtttgg agccaagggt ctgagaagg cattgggtat ggggccaggc ccttgatga atactctgtg ggcctgggtt atttctggt ggcctcatgg ggtgttcta gactggatt tcttggtgag gtccaagctg tctgtgtgt caacatgctt gcccagcag gctctggacc tgcctgtgaa cctggcagaa gcccggcaa tttgactgt tgtgctacg cccctgctc tgcctctat ctgcaccag gccacctgaa cctcttggc ctctctgccc cctctgaag gatgtcttc tcatctggac accctggaa gcaaatccta gtctcttcc cactgtcaa cctgaattaa agctacact gcctttgtg MASSGVYVLA ELSPSTENS QLDFFDVNS SYGVNDSFPD GDYDANLEAA APCHCNLLD P DSALPFFILT SVLGILASST VLEMLRPLF RWQLCPGWPV LAQLAVGSAL FSIVVPVLAP GLGSTRSSAL CSLGYCWWYG SAFAQALLLG CHASLGHRIG AGQVPLTLG LTVGIWGVAA LITLPTVLAS GASGGLCTLI YSTELKALQA THTVACLAIF VLLPLGLFGA KGLKALGMG PGPWNILWA WFIWPHGV VLGLDFIVRS KILLISTCLA QQALDILLNL AEALAILHCV ATPLLLALFC HQATRTLPS LPLPEGWSSH LDTIGSKS	Homo sapiens
110	1424	Duffy Antigen	NP_002027.1		Homo sapiens

111	1451	EBV-Induced Gene 2	NM_004951	ggaattccct gataacacc tggaccacca ccaatggata tacaatggc aaacaatttt A actcgcctct ctgcaactcc tcagggaat gactgtgacc tctatgcac tcacagcacg gccaggatag taatgcctct gcattacagc ctgccttcca tctatggct cgtgggaaac ttactagcct tggctgtcat tgttcaaac agaaaaaaa tcaactctac caccctctat tcaacaaatt tgggtatttc tgataactt ttaccaccg ctttgcctac acgaatagcc tactatgcaa tgggctttga ctggagaatc ggagatgcct tgttaggat aactgcgcta gtgttttaca tcaacacata tgcaggtgtg aactttatga cctgcctgag tattgaccgc ttcattgctg tgggtcaccc tctacgtac aacagataa aaaggattga acatgcaaaa ggcgtgtgca tattgtctg gatttagta ttgtctcaga cactcccat cctcatcaac cctatgtcaa agcaggaggc tgaaggatt acatgcattg agtatccaaa ctttgaagaa actaaatctc ttccctggg tctgcttgg gcatgtttca tagtatatgt acttccactt ataatcattc tcatctgcta ttctcagatc tctgcaaac tctcagaac tgccaaacaa aaccactca ctgagaaatc tgggtaaac aaaaggctc tcaacacaa tattcttatt attgttgtgt ttgttctctg ttccacacct taccatgttg caattattca acatatgatt aagaagcttc gtttctctaa ttctctggaa tgtaggccaaa gacattcgtt ccagatttct ctgcacttta cagtatgcct gatgaacttc aattgctgca tggacccttt tatctacttc tttgcattga aagggtataa gagaagggtt atgaggtgc tgaacggca agtcagtga tcgatttcta gtctgtgaa gtcagccct gaagaaaatt cactgaaat gacagaaacg cagatgatga tacattccaa gcttcaaat ggaagtga atgagttga ttttgggtta tagtgacgta aactgtatga caaactttgc agacttccc ttataagca aataaattgt tcagcttcca atagtatctc ttttatattt ctttcaattg gcactttccc atctccaaact cgggaagtaag cccaagagaa caacataaag caacaacat aaagcacaat aaaaatgcaa ataaatattt tcatttttat ttgtaaacga atacaccaa aggagcgct cttataaact cccaatgtaa aaagttttgt ttaataaaa aatttaatta ttatttcttg ccaacaaatg gctagaaagg actgaataga ttatatattg ccagatgta atactgtaac atactttta aataacatat ttcttaaatc caaatttctc tcaatgttag atttaattcc ctcaataaca ccaatgtttt gtttgtttc gttctgggtc ataaaacttt gtttaaggaa tcttttgaa taaagagcag gatgctgc	Homo sapiens
112	1451	EBV-Induced Gene 2	NP_004942.1	MDIQMANFT PPSATQGN CDLYAHSTA RIVMPLHYSL VFIIIGLVNL LALVVIVQNR P KKINSTLYS TNLVISDILF TTALPPIAY YAMGDMRIG DALCRITALV FYINTYAGVN FMTCLSIDRF IAVVHPIRYN KIKRIEHAK VCIFWILVF AQTLPILINP MSKQEAERIT CMEYPNFEET KSLPWILLGA CFIGYVLP LIILICYSQIC CKLFRTAKQN PLTEKSGVVK KALNTIILII VVFVLCFTPY HVAIIQHMIK KLRFSNFLEC SQRHFSQISL HFTVCLMNFN CCMDPFIYFF ACKGYKRKVM RMLKRQVSVS ISSAVKSAPE ENSREMTETQ MMIHKSNSNG K	Homo sapiens
113	1486	Endothelin B Receptor	NM_000115	gagacattcc ggtgggggac tctggccagc ccgagcaacg tggatcctga gagcactccc A aggtaggcatt ttgccccggt gggacgcctt gccagagcag tgtgtggcag gccccgtgg aggatcaaca cagtggctga acactgggaa ggaactggta cttggagtct ggacatctga aacttggctc tgaactgcg cagcgccac cggacgcctt ctggagcagg tagcagcatg cagcgccctc caagtctgtg cggacgcgc ctggttgcgc tggttcttgc ctgcggcctg tcgcggatct ggggagagga gagaggcttc ccgcctgaca gggccactcc gcttttgcaa	Homo sapiens

accgcagaga taatgacgcc accactaag accctatggc ccaagggttc caacgccagt
ctggcgcggt cgttggcacc tgcggaggtg cctaaaggag acaggacggc aggatcccg
ccaagcacca tctccctcc ccgltgcca ggacccatgg agatcaaggga gactttcaaa
tacatcaaca cgttctgtg ttcgtgtgtg ttggtgtgtg ggatcatcgg gaactccaca
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aaagcctccg tgggaatcac tgtgctgagt ctatgtgctc tgagtattga cagatatcga
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tataactt ttaaaagaa aattattaca tctttacat tcagttaaga tcaacctca
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gcaggtagca cctctctca cccatgctgt ggttaaaatg gttctagca tatgtataat
gctatagita aaatactatt ttcaaaatc atacagatta gtacatttaa cagctacctg
taagcttat tactaatttt tgtattattt ttgtaaatag ccaatagaaa agtttgcctg

114	1486	Endothelin B NP_000106.1 Receptor	acatgggtgct tttcttctcat ctgaggagcaa aactgctttt tgagaccgta agaacctctt agctttgtgc gttctctgctt aatttttata tcttctaagc aaagtcctt aggatagctt gggatgagat gtgtgtgaaa gtagtacaa gagaaacgg agagagagg aatgaggtg gggttgagg aaacccatgg ggacagattc ccattcttcc ctaacgttc gtcattgctt gctcacatca atgcataaagg tctgtattt gtccagcaa aacacagtc aatgttctca gagtacttt cgaataaat tgggcccag agctttaact cgttctttaa atagcccaa atcttactt tgttttctt ttaataggct ggccacatg ttggaataa gctagtaatg ttgtttctg tcaatattga atgtgatgt acagtaaac aaacccaac aatgtggcca gaaagaaga gcaataataa ttaattcaca caccataggt attctattt taaatcaccc acaaactgt tctttaatc catcccaatc atctttcag aggcctgta tcatagaagt cattttagac tctcaattt aaattaattt tgaatcacta atatttcac agtttattaa tatattaat tcttatttaa atttagatt attttatta ccatgactg aattttaca tctgatacc cttctcttct ccatgtcagt atcatgttct ctaattatct tgccaaattt tgaaactaca cacaaaaagc atactgtcat tattataat aaattgcat tcatgggctt tttaaaaaa atgtttgatt caaaacttta acatactgat agtaagaaa caattataat ttctttacat actcaaaacc aagatagaaa aagtgctat cgttcaactt caaacatgt ttcctagat taaggacttt aatatagcaa cagacaaaat tattgttaac atggatgta cagctcaaaa gatttataa agattttaac ctattttct cctattatc cactgtaat gtggatgat gtcaaacac cttttagat. ttagagctta catatggcca aagaaataca gtttatagca aaacatgggt atgctgtagc taactttata aagtgtaat ataacaatgt aaaaaattat atactggga ggaattttt gtgcctaaa gtgctatag ttagtattt tttattatgt aagcaaaacc aataaaaatt taagttttt taacaactac cttattttt actgtacaga cactaattca ttaataacta atgtatgt taaaagaaat ataatgtga caagtggaca ttatttatgt taaatataca attataagc aagatgaag ttattcaat aaaatgccac atttctggtc tctggg	Homo sapiens
115	1488	Endothelin A NM_001957 Receptor	SLARSAPAE VPKGDRTAGS PPTISPPPC QGPIEKETF KYINTVWSCL VFVLGIIGNS TLRIIYNK CMRNGNILL ASLALGDLH IVIDIPINV KLLAEDWPFV VLAPEAIGF QKASVGITVL SICALSIDRY RAVASWSRIK GIGVPKWTAV EIVLIWWSV VLAPEAIGF DIITMDYKGS YLRICLIHPV QKTAEMQFYK TAKDWLFSF YFCLPLAITA FFYTLMTCEM LRKSGMQIA INDHKQRE VAKTVFLVL VFALCWLP LH LSRILKLTLY NONDENRCEL LSFLVLDDYI GINMASLNSC INPIALYVS KRKNCFKSC LCCWQSFEE KQSLEEKQSC LKFKANDHGY DNFRRSNKYS SS gaatttcgag ccgctctctt cggctccaga gtggagtga aggtctggag ctttgggagg A agacgggag gacagactgg agcggtgtc ctcggaggt tctttttcg tgcgagccct cgcgcgcg tacagtcac ccgctgtct gacgattgt gagagcggt ggagagcctt catccatccc acccgctgt cgcggggat tgggtccca gcacacctc cccggagaa gcagtgcga ggaatttc tgaagccggg gaagctgtgc agccgaagc gccgcgcgc cgagagccgg gacacggcc accctcgcg ccaccacc tcgcttctc cgcttctc tggccaggc gccgcgga cccgcagct gctgcgcac gccgagctc acgtgaaaa aaaaagtga ggtgtaaaag cagcacaagt gcaataagag atatttctc aaattgctt	Homo sapiens

caagatggaa acccttggc tcagggcac cttttggctg gcactgggtg gatgtgtaat
cagtataat cctgagagat acagcacaaa tctaagcaat catgtgggatg atttcaccac
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agccagctt gccctggag acctatcta tgtgtcatt gatctcccta tcaatgtatt
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cacctccat tctcttaatt ttgttataaa tgttaactgg cagtaagtct ttttgatca
ttccctttc catataggaa acataatttt gaagtggcca gatgattta tcatgtcagt

116	1488	Endothelin A NP_001948.1 Receptor	gaaaaataat taccacaaa tgcacaccagt aacttaacga ttcttcacit cttgggggttt tcagtatgaa cctaactccc caccocaaca tctcoctccc acattgtcac catttcaaag ggccacagct gacttttgcg gggcattttc ccagatgttt acagactgtg agtacagcag aaaatctttt actagtgtgt gtgtgtatat atataaaca ttgtaaaattt cttttagccc atctttctag actgtctctg tggatatat ttgtgtgtgt gatatatgca ttgtgtgtgat ggatatgtg gatttaactc atctaataa ttgtgccccg cagttgtgac aaagtgcata gtctgagcta aaatctaggt gattgttcat catgacaacc tgcctcagtc catttaacc tgtagcaacc ttctgcattc ataaactctg taatcatgtt accattacaa atgggatata agaggcagcg tgaagcaga tggagtgtg actagcaata taggggtttg ttfggttggg tggtttgata aagcagtatt tgggttcata ttgtttcctg tgcggagca aahtcatta cactttgaag tattatattg ttcttatcct caattcaatt tgggtgatgaa atgcccaggt tgtctgatat ttctttcaga cttcgcaga cagattgtcg ataataaatt agtcaagata atttgtggg ccataattta ggacaggtaa aataacatca ggttccagtt gcttgaattg caaggctaag aagtaactgc cttttgtgtg ttagcagtca aatctattat tccactggcg catcatatgc agtgatatat gcctataata taagccatag gtccacacca tttgttttag acaattgtct ttttttcaag atgctttgtt tctttcatat gaaaaaaatg cattttataa attcagaaag tcatagattt tctgaaggcgt caacgtgcat tttattttat gactgggtaag taactgtgtt ttactagcag gaattattcc aattctacc ttactacat cttttcaaca agtaactttg tagaaatgag ccagaagcca aggcctgag ttggcagtg cccataagtg taaaataaaa gtttacagaa acctt	Homo sapiens
117	1598	Calcium- Sensing Receptor (CASR)	caacaggcac ctggctgcag ccaggaagga ccgcaagccc ttctgcgag gagatggaa A ggaggagct gtttgcagc accgaggtct tgcggcacag gcaacgcttg acctgagctt tgcagaatga aaggcatcac aggagccctc tgcagtatgt ggttcccaaa gactcaagga ccaccacat tacaagtctg gattgaggaa ggcagaaaatg gagattcaaa caccacgtct tctattattt tattaatcaa tcttagaca tgtgtccca ctgcaggag tgaactgctc caaggagaa acttctggga gcctccaaac tcttagctgt ctatccctt gcctggaga gacggcagaa ccatggcatt ttatagctgc tgcgtgggtcc tcttggcact cactggcac acctctgctt acgggccaga ccagcagcc caaagaag gggacattat ccttgggggg ctctttccta ttcatttttg agtagcagct aaagatcaag atctcaaatc aagcccgag tctgtggaat gtatcagcta taatttccgt ggtttcgtt ggttacagc tatgatattt gccatagagg agataaacag cagccagcc cttctccca acctgacgt gggatcacg atatttgaca cttgcaacac cgtttctaag gccttggaa cccactgag tttgttgc caaaacaaaa ttgattcttt gaaccttgat gatttctgca actgctcaga gcacattccc	Homo sapiens

tctacgattg ctgtgtgtgg agcaactggc tcaggcgctc ccacggcagt gcaaatcttg
ctggggctct tctacattcc ccaggtcagt tatgctctct ccagcagact cctcagcaac
aagaataat tcaagtcttt cctcgaacc atccccaat atgagcaca ggcactgac
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gaggcctgg ccagctctc cctgatgcc atgccagt acttccact ggttggcggc
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aagagcaaca gcgaagacc atttccacag ccgagaggc agaagcagca gcagcgtg
gccctaacc agcaagagca gcagcagcag cccctgacct tcccacagca gcaacgatct

118	1598	Calcium- Sensing Receptor (CASR)	NP_000379.1	<p> cagcagcagc ccagatgcaa gcagaaggtc atctttggca gggcacggt cactttctca ctgagctttg atgagcctca gaagaacgcc atggcccacg ggaattcttac gcaccagaa tccttgagg ccagaaaaag cagcgatagc ctgaccccg accagccatt atccccgtg cagtcgggg aaacgactt agatctgacc gtccaggaaa caggtctgca aggacctgtg ggtgagacc agcgccaga ggtgaggac cctgaagagt tgtcccagc actgtagtg tccagttcac agagctttgt cateagttgt ggagcgagca ctgttacaga aaacgtagt aattcataaa atggaaggag aagactggc tagggagaat gcagagaggt ttcttggggt cccagggatg aggaatgcc ccagactcct ttctctctgag gaagaaggga taatagacac atcaaatgcc ccgaatttag tcacaccatc ttaaatgaca gtgaattgac ccatgttccc ttt </p>	Homo sapiens
119	1676	Formyl Peptide Receptor- Like Receptor	NM_001462	<p> MAFYSCCWL LALTWHTSAY GPDQRAQKG DIILGGLFPI HFGVAAKQD LKSPESVEC P IRYNFRGRW IQAMIFAEE INSSPALLPN LTGVRIFDT CNTVSKALEA TLSFVAQNKI DSLNLDEFNC CSEHIPSTIA VVGATGSGVS TAVANLLGLF YIPQVSYASS SRLSNKNQF KSFLRTIPND EHOATAMADI IEYFRWNWVG TIAADDDYGR PGIKXFREEA EERDICIDFS ELISQYSDDE EIQHVVEVIQ NSTAKVIVVF SSGPDLPLI KEIVRNITG KIWLASEAWA SSSLIAMPQY FHVVGCTIGF ALKAGQIPGF REFLLKVHPR KSVHNGFAKE FWEETFNCHL QEGAKGLPV DTFLRGHEES GDRFSNSTA FRPLCTGDN ISSVETPYID YTHLRISYNV YLAVYSIAHA LQDIYTCPLG RGLFTNGSCA DIKKVEAWQV LKHLRHLNFT NNMGEQVTFD ECGDLVGNYS IINWHLSPED GSIVFKEVGY YNVYAKKGER LFINEEKILW SGFSREVPFS NCSRDCIAGT RKGIIIEGPT CCCEVCECPD GEYSDETAS ACNKPDDDFW SNEHTSCIA KEIEFLSWTE PFGIALTLFA VLGIETAFV LGVFIKFRNT PIVKATNREL SYLLFSLLC CFSSSLFFIG EPQDWTCRLR QPAFGISFVL CISCILVKTN RVLIVFEAKI PTFEHRKWWG LNQLFLIVEL CTFMQIVICV IWLYTAPPSS YRNOELEDEI IFITCHEGSL MALGFLIGYT CLLAICFFF AFKSRKLPEN FNEAKFITFS MLIFFIVWIS FIPAYASTYG KFVSAVEVIA ILAA5FGLA CIEFNKIYII LFKPSRNTIE EVRCSTAHA FKVAARATLR RSNVSRKRSS SLGGSTG5TP SSSISSKSN5 EDPFQPERQ KQQPLALTQ QEQQOQLTL PQQRSQQP RCKQKVI5GS GTVTF5LSFD EPQKNAMAHG NSTHONSLEA QKSDTLTRH QPLLPLQCGE TDLDLTVQET GLQGPVGGDQ RPEVEDPEEL SPALVVS5SQ SFVISGGST VTENVVNS ggcacgagga acaactatt tgcaagttg gcgcaaacat tcctgcctga caggaccatg A gacacaggtt gttagatag agatggctct ggctgtgcat tcagcagatt ctgtagatag aattaatagg acttgatagg gatttggtg agagaaagt aatgaaaga taagtcttag tttggaagtt ttaacaactg aatgtttaa ctcaaataga cacaaatat tggaagagtg gcaggtttgg gaggatgaga caatcaactg ttgtgttag ccacttagg ttgaaatgt ctacgggatc ccgtggggag aggttatatc agactggagc accagagaga ggcaaggct gatagtttag atgaaaagag agcatgatat ttaaagccct gagactggat aatatcacct atagaaagac tatatagaga taagagaggt gggaacaaga taaagctgc gggacactcc taaatataga gtcaaat5ta gagcagaaaa tactagcaa ggggactgaa aagcgttggc caattgagct tcaaatgcaa gtgaaagtgt gttgtgtgta cattatcat ctcatggcac aggaaaaacg tgatttaagg agaaggaagc gatccaatgg gaagagaga tccaatggat cctctatcac gaagatat5t agataagaac caatatggat ttgcacccac tgcatttgca gccttgaggt cataagcatc ctcaggaaaa tgaccagggt gtgtgtggca agatgaaac </p>	Homo sapiens

120	1676	Formyl Peptide Receptor- Like Receptor	NP_001453.1	caactttctcc actcctctga atgaatatga agaagtgtcc tatgagtctg ctggctacac tggtctgagg atcctcccat tgggtgtgct tggggtcacc tttgtcctcg gggctcctggg caatgggctt gtgatctggg tggtgtgatt ccggatgaca cgcacagtea ccaccatctg ttacctgaac ctggccctgg ctgacttttc ttccacggcc acattaccat tcttcattgt ctccatggcc atgggagaaa aatggccttt tggtgggttc ctgtgaagt taattcacat cgtgtggac atcaacctct ttggaagtgt ctcttgtatt ggtttcattg cactggaccg ctgcatttgt gtccctgcatc cagtctggc ccagaaccac cgcactgtga gtctggccat gaaggtgac gtgggacctt ggattcttgc tctagtctt accctgccag tttcctctt tttgactaca gtaactattc caatgggga cacatactgt acttccaact ttgcactctg gggtggcacc cctgaggaga ggctgaaggt ggccattacc atgtcgacag ccagagggat tctcgggtt gtcatgtgct ttagtctgc gatgtccat ttgtccatct gctatgggt cattgcagcc aagatccaca aaaggggcat gattaaatcc agcgtccct tacgggtcct cactgtgtg tggtctctt tcttcactg ttgtttccc ttccaactgg ttgccccttct gggcaccgtc tggctcaag agatgttgt ctatggcaag tacaaaaatca ttgacatcct ggttaacca acgagctccc tggccttctt caacagctgc ctaaacccca tgccttacgt ctttgtggc caagacttcc gagagagact gatccactcc ctgccacca gtctggagag ggccctgtct gaggaactcag ccccaactaa tgacacgggt gccattctg ctccactcc tgacagact gagttacag caatgtgagg atgggtcag ggaattttt agtctgttct atcctacctt aatgccagt ccagcttcat ctaccctga gtcattatga ggcattcaag gatgcacag tcaagtattt atcaggaaa aatgctttt tgccctgat ttggggctaa gaaatagaca gtcaggctac taaaatatta gtgtattt ttgtttttt actctgctt ataccctgg gtaagtggag ttgggaaata caagaagaga aagaccagt gggatttga agacttagat gagatagcgc atataaagg gaagacttta aagtataaag taaaatgtt gctgtagggt ttttatagct attaaaaaa atcagattat ggaagtctt tctattttt agtttgctaa gagtttctg tttcttttc ttacatcat agtggacttt gcattttatc aaatgcattt tctacatgta ttaagatggt catattattc tcttctttt atgtaaaatca ttataataa tgttcattaa gttctgaatg ttaactact ctggaattcc tggataaaac cacacttagt cctgatgtac tttaaatatt tatatctac aggaatttgt tagaatttct gtgtttatgt ttataactg ttatttcaat ttttctacta tcttgctaa gtttcatag aaaaaagga acaagagaa acttgaatg gtctctgaaa aggaattgag aagtaattcc tctgattctg ttttctggtg ttatatctt attaatatt cagaaaaatt C TICVLNLA DFSFTATLPF LIVSMANGK WPFGWFLCKL IHVVDINLF GSVFLIGFIA LDRICVLHP VWAQNRTVS LAMKVIVGPW ILALVLTLPV FLFLTVP TIP NGDTYCTFNF ASWGGTPEER LKVAITMLTA RGLIREVIGF SLPMISVAIC YGLIAAKIHK KGMKSSRPL RVLTAVASF FICWFFQLV ALLGTWLKE MLFYGYKII DILNPTSSL AFFNSCLNPM LVFVGGQDFR ERLIHSUPTS IERALSEDSA PTNDTAANSA SPPAETELQA M	Homo sapiens
121	1681	Follicle Stimulating Hormone Receptor	NM_000145	cgctgagatc tgtggaggtt ttctctgca aatgcagaaa gaaatcaggt ggaatgatgc A ataattatgg cctgtctcct ggtctcttg ctggctatcc tgagtttgg ctcaggatgt catcatcgga tctgtcactg ctctaacagg gtttttctct gccaagagag caagtgaca gagattcctt ctgacctccc gaggaatgcc attgaactga ggtttgtcct caccaagctt	Homo sapiens

122	1681	Follicle stimulating Hormone Receptor	NP_000136.1	<p> cagatcatcc aaaaggtgc atttccagga ttgggggacc tggagaaaaat agagatctct cagaatgatg tcttgaggt gatagagga gatgtgttct ccaaccttcc caattatcat gaaattagaa ttgaaaggg caacacctg ctctacatg cccctgaggc cttccagaac cttcccaacc ttcaatatct gtaatatcc aacacagga ttaagcacct tccagatgtt cacaagattc attctctcca aaggtttta ctgacattc aagataacat aaacatccac acaattgaaa gaaattcttt cgtggggctg agcttggaaa gtgtgattct atggctgaat aagaatggga ttcaagaaat acacaactgt gcattcaatg gaaccaact agatgcagtg aatctaagcg ataataataa tttagaagaa ttgcttaatg atgttttcca cggagcctct ggaccagtc tctagatat ttcaagaaca aggtccatt cctggccctag ctatggctta gaaaatctta agaagctgag ggcaaggtcg acttacaact taaaaaagct gcctactctg gaaaagcttg tcgacctcat ggaagccagc ctcaactatc ccagccattg ctgtgccttt gcaaaactgga gacggcaaat ctctgagctt catccaattt gcaaaaaatc tattttaagg caagaagtgg attatatgac tcaggctagg ggtcagagat cctctctggc agaagacaat gagtcagct acagcagagg atttgacatg acgtacactg agtttgacta tgacttatgc aatgaagtgg ttgacgtgac ctgtccctcc aagccagatg cattcaacct atgtgaagat atcatggggt acaacatcct cagagctctg atatgttta tcagcatcct ggccatcact gggaacatca tagtgtagt gatcctaact accagccaat ataaactcac agtcccagg ttccttatgt gcaacctggc ctttctgat ctctgcttg gaatatcct gctgctcatt gcatacgttg atatecatc caagagccaa tatecaact atgccattga ctggcaaat ggggcaggct gtgatctgc tggctttttc actgtctttg ccagttagct gtcagtctac actctgacag ctatcacctt ggaaagatgg catcacatca cgcagtccat gcagctggac tgcaaggtgc agtcccgcca tgcctccagt gtcagtgtga tgggctggag ttttgccttt gcagctgcc tctttcccat ctttggcatc agcagtaca tgaaggtgag catctgcctg cccatggata ttgacagcc ttgtccacag ctgtatgtca tgtccctcct tgtgtcfaat gtcctggcct ttgtgtcat ctgtggctgc tatatccaca tctactcac agtgcggaac cccaacatcg tgtctctctc tagtgacacc aggtatcgca agcgtatggc catgtctatc ttcactgact tctctgcat ggcacctt tcttctttg ccatctctgc ctccctcaag gtgcccctca tcactgtgc caaagcaaa agtctgtctg tctgttttca ccccatcaac tctgtgcca acccttctct ctatgccatc ttaccacaaa actttcgag agatttcttc attctgtga gcaagtgtg ctgctatgaa atgcaagccc aaatttatag gacagaaact tcatacactg tccacaacac ccatacaagg aatggccact gctcttcagc tcccagagtc accagtgtt ccattacat acttgcctct ctaagtcat tagcccaaaa ctaaaacaca atgtgaaat gtatctgagt attgaatgat aattcagtc ttgctttga aggtatgtc acaaggagct gacagtgtt ctacacattt catctaattt aaattctctg gataccttt aaggtaaatt ggtcaggaaac tattaattcc atgtatata ttaggaagct gaattattag taacaacaat aataattaaa gaatgaata ctgtaaaaa gcggccgcga att </p>	Homo sapiens
				<p> MALLVSLLA FLSLGSCHH RICHCSNRVF LCQESKVEI PSDLPNAIE LRFVITKLRV P IQKGFSGFG DLEKIEISQN DVLEIEADV FSNLPKLHEI RIEKANNLLY ITPEAFQNL P NLQYLISNT GIKHLPDVHK IHSLSQVLLD IQDNIINIHTI ERNSFVGLSF ESVILWLNK N GIQEIHNCAF NGQLDAVNL SDNNLEELP NDVFHGASGP VILDISRTRI HSLPSYGLE N LKKLRARSTY NLKLPLEK LVALMEASLT YPSHCCAFAN WRRQISELHP ICKNSILRQE </p>	

123	1726	G Protein- Coupled Receptor RDC1	U67784	<p>VDYMTQARGQ RSSLAEDNES SYSRGFDMTY TEFDYDLGNE VDVTCSPKP DAFNPCEIDIM GYNILRLVLW FISILAITGN IIVLVILTTS QYKLTVPREL MCNLAFAEDLC IGIYLLLLIAS VDIHTKSQYH NYAIDWQTGA CDDAAGFTTV FASELSVLYL TAITLERWHT ITHAMQLDCK VQLRHAASVM VMGWIFAEAA ALFPFEGISS YMKVSIICLPM DIDSPLSOLY VMSILLVLNL AFVVICGCIY HIYLTVRNPV IVSSSSDTRI AKRMAMLIPT DFLCMAPISF FAISASLKV LITVSKAKIL LVLFHPINSC ANFLYAIPT KNFRDRDFIL LSKGCGYEMQ AQIYRTETSS TVHNTHPRNG HCSSAPRVTG GSTYILVPLS HLAQN</p> <p>gccaaactcgg tgggtggtcgt ggtgaatc caggccaaga ccacaggcta tgacacgcac A tgtacatct tgaacctggc catgcccagc ctgtgggttg tctcaccat ccaagtcctgg gtgtcagtc tctgtcagca caaccagtgg cccatgggtg agctcacgtg ccaagtcaca cacctcatct tctccatcaa cctcttcagc agcattttct tctcacgtg catgagcgtg gacgctacc tctccatcac ctacttcacc aacaccccca gcagcaggaa gaagatggtg cgccgtgtg tctgcatct ggtgtggctg ctggccttct ggtgtctct gcctgacacc tactacctga agaccgtcac gtctgctgc acaatgaga cctactgcgg gtccttctac ccgagcaca gcatcaagga gtggtgctgc tctacttc tgctggccag agccatctcg tttgccgttc ccttctccat tatgctgtc tctacttc tgctggccag agccatctcg gcgtccagt accagagaa gcaacgagc cggaagatca tcttctccta cgtggtggtc tctctgtct gctggtgctc ctaccagt gcggtgctg tggacatct ctcacatctg cactacatcc ctttcaactg ccgctggag cagccctct tcacggccct gcattgcaca cagtgcctgt cgctggtgca ctgctgcgtc aacctgtcc tctacagctt catcaatgc aactacaggt acgagctgat gaagccttc atctcagg gagcaggact actcgccctt ggcagagc accaagctca tcatgctc cagagctc gagagctga gacgggtta ctgtttttg aacagggtga acaaaatgat ctgctctga gagctctg gacgggtta ctgtttttg aacagggtga tgggcccctat ggtttctag agcaagcaa agtagcttc ggtcttgat cttgagtaga gtgaagagg gagcagctg acagtttgc aacaggcaga gctgtgtgc acagcagtc tcatttgct gtgctgctg acagtttgc aacaggcaga gctgtgtgc acagcagtc tgtgctcag agccagctga ggacaggctt gctggact ctgtaagata gattttctg tgttctcga atttttata tgggtattg tattaaatt ttaagactt attttctac tattggtga cttataaat gtattgaaa gtaaatata ttttaaat ttttgggag gcatagct gacatatatt cagagtgtg tagtttaag gtagcgtga cttcagttt tgactaagga tgactaat ttttagctgt ttgaaatta tatataata aatatataa tatatgccag tcttgctga aatgtttat ttaccatagt tttatctg tgtgtgttt tgtaccgca cgggatatg aacgaaact gcttgtaac gactttgt acataatag tattgtaaag ttacattta aaataacaa aacactgtc tggactgcaa atctgcacac acaacgaaca gttgcatttc agagattct ctcaattgt agttatttt ttttaataa agattttgt tctcaaaa aaaaaaaa aaaaa</p> <p>MDLHFDYAE PGNFSDISWP CNSSDCIVD TVMCNMPNK SVLLYTLSEI YIFIVIGMI P ANSVVVWNI QAKTTGVDTH CYILNLAID LWWLTIPW VSLVQHNQW PMGELTCKVT HLIFSINLFS GIFFTCMSV DRYLSITYFT NTPSSRRKQW RRVCILVWL LAFVSLPDT YYLKTVTAS NNETYCRSFY PEHSIKEWLI GMELSVVLG FAVPSIIAV FYELLARAI ASSDQEKHSS RKLIIFYVVV FLVCLPYHV AVLLDIFSIL HYIPTCRLE HALFTALHVT</p>	Homo sapiens
124	1726	G Protein- Coupled Receptor RDC1	AAA62370.1	<p>MDLHFDYAE PGNFSDISWP CNSSDCIVD TVMCNMPNK SVLLYTLSEI YIFIVIGMI P ANSVVVWNI QAKTTGVDTH CYILNLAID LWWLTIPW VSLVQHNQW PMGELTCKVT HLIFSINLFS GIFFTCMSV DRYLSITYFT NTPSSRRKQW RRVCILVWL LAFVSLPDT YYLKTVTAS NNETYCRSFY PEHSIKEWLI GMELSVVLG FAVPSIIAV FYELLARAI ASSDQEKHSS RKLIIFYVVV FLVCLPYHV AVLLDIFSIL HYIPTCRLE HALFTALHVT</p>	Homo sapiens

125	1762	Galanin Receptor GalR1	NM_001480	AK	QCLSLVHCCV NPVLVSFINR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALEQN	Homo sapiens
					atcccgtag aatccgtcca gtctctgtct cgcaccctg acttctaagg ggcgcggatt A	
					tcagccgagc tgttttcgc tctcagttgc agcagagaag cccctggcac cccgactctat	
					ccaccaccag gaagcctccc aaagagctc tcgcctgtg gacgactcg aatccctgga	
					aaagccggga gggagtcgga ggcgccagcc cactggggag gtggcgctgg gcgcgcggga	
					tgccgcggga gccttctctg caggagccgc acagtgcact gctgcgcgt gggcagtgcg	
					gggaagcgcc gcgggaagga gcggctccga gcaacaggtg cagcacgcag ccgctccggg	
					agccaaggaa aaccgcggc gaagatcttg agcgtaagg cggagagaag ggtcttcca	
					cctgcggc tgacgcggc ccagtgctct tcccagctc cgtgtcgcg cagcggcgcg	
					agggcggcg gcaggggacc ccagtgctct cgagatcac gtccctccc gagaaggtcc	
					agtcggggc tccgaaacc accctctctc agaagtlcg ggcgaaga cgtgcccacc	
					aggcacggc accgatccc cgctccgct ggctgcgc tcgggggaa ctcagactcc	
					taaaactgca ctctcgtgc ttgcccgg gaccctggc caccocggc gccctgtatc	
					cggccctccc tcccgcggc cccgcgcgt cgcgggaca gcccccggg ccatggagct	
					ggcggtcgg aacctcagc agggcaacgc gagctggcg gagcccccg ccccgagcc	
					cgggcgctg ttccgcatcg gcgtggagaa ctctgcacg ctggtggtgt tcggcctgat	
					cttcgcgtg ggcgtgctgg gcaacagcct agtgatcac gtgtggcg gcagcaagcc	
					gggcaagccg cggagaccca ccaacctgtt catctcaac ctgagcatcg ccgacctggc	
					ctacctgtc ttctgcatcc ccttcaggc caccgtgtac gcctggccca cctgggtgct	
					gggcgcctc atctgcaagt tcatcacta cttcttcac gtgtccatg tggtagagcat	
					cttcacctg gccgcgatgt ccgtggaccg ctactggccc atcgtgcact cgcggcgctc	
					ctctccctc aggggtgcc gcaacgcgt gctggcggtg ggctgcact gggcgctgtc	
					cattgccatg gctcgcccg tggcctacca ccaggccctc tccaocgg gcgccagcaa	
					ccagacctc tgctgggagc agtgcccga cctcgccc cctgtctatc tgctgtgct atgcaagg	
					caccttcgtc ttgggtacc tgctgcgct cctgtctatc tgctgtgct atgcaagg	
					ccttaatcac ttgcataaaa agttgaaga catgtcaaa agtctgaag catccaagaa	
					aaagactgca cagacagttc tgggtgtggt tgtgtgtgtt ggaatctcct ggctgcgca	
					ccacatcatc catctctggg ctgagtttgg agtttccc ctagcccg cttcttctc	
					cttcagaatc accgccact gctggcgta cagcaattcc tccgtgaatc ctatcattha	
					tgcatcttc totgaaaatt tcaggaaagg ctataaaca gtgttcaagt gtcacattcg	
					caaaagtcca cactgagtg atactaaga aaataaagt cgaatagaca cccaccatc	
					aaccaattgt actcatgtg gataaagat agagtatcct tatgtgtgag ttccatata	
					agtggaccag acacagaac aaacagaatg agctagtaag cgatgctgca acttgtatc	
					ttacaagaaa ttcaagtctg tttaattaaa tcccagttgt gtaaaaagt acttgtatc	
					atttaggaaa ttcttaggtc tagtgagaat tattttcaa ttttatttta gttctaaatt	
					atgtttcaga aacaaaagac aatgctgtac agttttatc ctcttcagac atgaaaggga	
					acatatatat tccatatata tgttcaactc ttcatagatt gtgaactggc ccataatat	
					ggtcagggaat atttgagtc tacatttta agccaattta tttagaaaa aaattgagc	
					tttaattott taattttaag agaagtaata ttgtgacta tgtattttaa aatatgatca	
					tggaacacaca atgatgaatt ttttgccat ttacatagac atatttatta agtggaaaga	

126	1762	Galanin Receptor GalR1	NP_001471.1	aggtttctctg aagtcgtgtt gacagggtg catttgcttc caattgtagc tagcgacacg agctttggaa gcctgtcatt atgagataca gtccgtttac ctccaggagtc aattcagtg tgtactgtgt acctgggatg cagtagtag cactgtgtat tcaaatattat cctgtgaac tgctttata gatttaacaa aacagagtc gagaccactg tcttaacagt ggaagtgc aataagttt tgagaataaa actggattt gaaattttac attagtactt gacaaaagt ttcatttgc ctggaatga acctactaa aagagagatg aaaaaaatc agcaggttg atgtagataa taatttctat gggaccacaa actagacaga attcagtaag tcacatgaag taatgtcat gcctgtacat aaagcatatt tcatgtttga tttagatgac attcaaaaa aatcatgga ctgaatatac ctgggtatc ctatcttga caaatgcacg cttttcatt aaatttgtaa tgaattttaa tgaacatttc caccacacat tatttctct aaaaatgta atttgggtt aaaccatca ccatttgaat ttcaaatga gttttcatga caattttata ttgatgttg tttaaatga gaaatggca tgaataatt aaattgtctt gtatcg VSIFTLAAMS VDRYVAIVHS RRSSSLRVSR NALLGVGCIW ALSIAMSAPV AYHQGLFHP SKPKPRSTT NLFILNSIA DLAYLFCIP FQATVVALPT WVLGAFICKF IHYFTVSML ASNTQFCWEQ WDPDRHKAY VVCTFVGYL LPLLICFCY AKVLNHLKK LKMSKKSEA SKKTAQTVL VVVVFGISW LPHHIIHLWA EFGVFPLTPA SEFRITAHK LAYNSSVNP IIYAFLENF RKAYKQVFKC HIRKDSHLSH TKENSRIDT PPSTNCTHV	Homo sapiens
127	1808	Gastric Inhibitory Polypeptide Receptor	NM_000164	ggcagcggg gacggggctg caggagcaag tgaccaggag caggactggg gacaggcctg A atcgccctg caccgaaccag acccttcgcc gccctcacga tgactacctc tccgatacctg cagctgtgc tgcggctctc actgtcggg ctgtgtctcc agaggcgga gacagctct aaggggcaga cggcggggga gctgtaccag cgtgggaac ggtaccgcag ggaagtccag gagacctgg cagcgcgga accgcctca gccctgcct gtaacgggtc ctccgatatg tacgtctgt gggactatgc tgacccaat gccactgcc gtgcgtctc cccctggtag ctgccttggc accacatgt ggctgcaggt ttcgtctctc gccagtgtg cagtgatggc caatggggac ttgtgagaga ccatacaca ttgtagaacc cagagaagaa tgaggcctt ctggaccaaa ggctcatctt ggagcgggtt caggtcatgt acactgtcg ctactccctg tctctcgcca cactgtgtgt agcctgtctc atcttgagtt tgttcaggcg gctacattgc actagaaact atatccat caactgttc acgtcttca tgctgcgagc tgcggccatt ctcagccgag accgtctgt acctgacct ggccctacc ttggggacca ggcccttgg ctgtggaac aggcctcgc tgcctgcgc agggccaca tctgtaccca gtactgcgtg ggtgcaact acactggct gctgtggag ggcgtctacc tgacagtct cctgtgtctc gtggaggct ccgaggaggg ccactccgc tactacctc tcctcggctg gggggccccc gcgttttctg tcatccctg ggtgatcgtc aggtacctgt acgagaacac gcagtgtg gagcgaacg aagtcaaggc catttgggtg attatcagga cccccatct catgaccatc ttgattaatt tctcatatt tatccgatt ctgtgcatc tcctgtccaa gctgaggaca cggcaaatgc gctgcggga ttaccgctg aggtggctc gctccacgt gacgtgggtg ccctgctgg gtgtccaga ggtgtgttt gctccagtga cagagaaca gggccggggc gcctcgct tgcgcaagct cggctttgag atcttctca gctcctcca gggcttctg gtcagcgtcc tctactgct catcaacaag gaggtgcagt cggagatccg ccgtggctg caccactgcc gcttgcccg cagcctggg caggagcaac gccactccc ggagcgcc	Homo sapiens

128	1808	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	<p> ttcggggccc tgcctccgg ctccggccc ggcgaggtcc ccaccagccg cggctgtgccc tcggggaccc tcccaggccc tgggaatgag gccagccggg agttggaaag ttactgtctag gggcggggat cccgtgtct gtcagttag catgatttca ttgagtgcca atcgctgtcc aggccagta cggagacgc tggggaatg gtgaagaaa cagaaaaag gtcctgccc ttctggagat gacaactgag tggggaaac agaccgtgaa cacaaacat caagtccac acacgtatg gaatggttat gaagggaagc gagaagggg cctagggttg tctgggagcc gtctccaagg agtgacact taagccatcc ccgaagagg tgaagagat cacttgggg agagctggag aacaggattc taggcggaag cgatagcata ggcaaggcc ctggggcagg aaggcgctca gccttggtg gagtagaatt aagtcagagc caacaggttg gggagagaca gagaagtgg caggggcacc caagtggga ttcatattca ggtgcatgg agattcttag gagtgctct tgggggtaat atttatttt ttaaaaaat aggat gagtgctct tgggggtaat atttatttt ttaaaaaat aggat MTSPILQLL LRLSLGLLL QRAETGSKGQ TAGELYQWE RYRRCQETL AAAPPPSGLA P CNGSFDMYC WDYAAPNATA RASCPWYLPW HHVAAGEVL RQCGSDGQW LWRDHTQCN sapiens PEKNEAFLDQ RLILRLQVM YTVGYSLSLA TLLALLILS LFRRLHCTRN YIHNLFTSF MLRAAILSR DRLPRPGPY LGDQALALWN QALACRTAQ IVTQYCVGAN YTWLLVEGVY LHSLLIVGG SEEGHFRYYL LLGWGAPALF VIPWIVRYL YENTQCWERN EVKAIWIIIR TPILMTILIN FLIFIRILGI LLSKLRTROM RCRDYRLRLA RSTLTLPVLL GVHEVVFAPV TEEQARGALR FAKLGFEIFL SSFQGLVSV LYCFINKEVQ SEIRRGWHHC RLRLSLGEEQ RQLPERAFRA LPSGSGPEV PTERGLSSGT LPGPGNEASR ELESYC ccagattcta aatatcagga aagacgctgt gggaaaaatag caggccaaaa gttcttagta A aactgcagcc agggagactc agactagaat ggaggtagaa agaactgatg cagagtgggt ttaattctaa gccttttgtt ggctaagttt tgtgttgtt aactattga atttagagtt gtattgact ggtcatgtga aagccagagc agaccaggt tcaaatagtt gacagagagt ttgaaatacc atagttagta tatatgtact cagagtattt ttataaaga aggcaagag cccggcatag atcttattt catcttact cggttgcaaa atcaatagtt aaaaaatagc atctaaggga acttttaggt gggaaaaaaa atctagagat ggctctaaat gactgtttcc ttctgaactt ggagtgagc catttcatgc actgcaacat ctccagtcac agtgcggatc tccccgtgaa cgatgactgg tcccaccgg ggatctcta tgtcatcct gcagtttatg gggttatcat tctgatagc ctcatggca acatcacttt gatcaagatc ttctgtacag tcaagtccat gcgaacgtt ccaaacctgt tcatttccag tctggctttg ggagacctgc tctctaat aacgtgtgt ccaagtgatg ccagcagga cctggctgac agatggctat ttggcaggat tggctgcaa ctgataccct ttatacagct tacctctgtt ggggtgtctg tcttcact cagcgctc tcggcagaca gatacaaac catgtccgg ccaatggata tccaggcctc ccattgctc atgaagatc gcctcaaac cgcctttatc tggatcatct ccattgtgtt ggccattcca gagcgctgt ttctgacat ccattccttc catgaggaaa gcaccaacca gacctcatt agctgtgcc cataccaca ctctaagag cttcacccca aaatccattc tatggttcc ttctgtgtt tctagtcac ccaactgtc atcatctctg ttactacta ctcatgtct aaaaactga tccagagtgc ttacaattt cccgtggaag ggaatataca tgtcaagaag cagattgaat cccggaagc acttgcaag acagtgtg tgtttgtggg cctgttgcg ttctgtggc tcccaatca tgtcatctac ctgtaccgt cctaccacta ctctgaggtg gacacctca tgtccactt tgtccaccag atctgtgccc </p>	Homo sapiens
129	1813	Gastrin- Releasing Peptide Receptor	NM_005314	<p> ccagattcta aatatcagga aagacgctgt gggaaaaatag caggccaaaa gttcttagta A aactgcagcc agggagactc agactagaat ggaggtagaa agaactgatg cagagtgggt ttaattctaa gccttttgtt ggctaagttt tgtgttgtt aactattga atttagagtt gtattgact ggtcatgtga aagccagagc agaccaggt tcaaatagtt gacagagagt ttgaaatacc atagttagta tatatgtact cagagtattt ttataaaga aggcaagag cccggcatag atcttattt catcttact cggttgcaaa atcaatagtt aaaaaatagc atctaaggga acttttaggt gggaaaaaaa atctagagat ggctctaaat gactgtttcc ttctgaactt ggagtgagc catttcatgc actgcaacat ctccagtcac agtgcggatc tccccgtgaa cgatgactgg tcccaccgg ggatctcta tgtcatcct gcagtttatg gggttatcat tctgatagc ctcatggca acatcacttt gatcaagatc ttctgtacag tcaagtccat gcgaacgtt ccaaacctgt tcatttccag tctggctttg ggagacctgc tctctaat aacgtgtgt ccaagtgatg ccagcagga cctggctgac agatggctat ttggcaggat tggctgcaa ctgataccct ttatacagct tacctctgtt ggggtgtctg tcttcact cagcgctc tcggcagaca gatacaaac catgtccgg ccaatggata tccaggcctc ccattgctc atgaagatc gcctcaaac cgcctttatc tggatcatct ccattgtgtt ggccattcca gagcgctgt ttctgacat ccattccttc catgaggaaa gcaccaacca gacctcatt agctgtgcc cataccaca ctctaagag cttcacccca aaatccattc tatggttcc ttctgtgtt tctagtcac ccaactgtc atcatctctg ttactacta ctcatgtct aaaaactga tccagagtgc ttacaattt cccgtggaag ggaatataca tgtcaagaag cagattgaat cccggaagc acttgcaag acagtgtg tgtttgtggg cctgttgcg ttctgtggc tcccaatca tgtcatctac ctgtaccgt cctaccacta ctctgaggtg gacacctca tgtccactt tgtccaccag atctgtgccc </p>	Homo sapiens

130	1813	Gastrin- Releasing Peptide Receptor	NP_005305.1	<p>gctctctggc cttaccacac tctcgctgta accctttgc cctctacctg ctgagcaaga gtttcaggaa acagttcaac actcagctgc tctgttgcca gcttggcctg atcatccggt ctcacgacac tggagagagt acaacctgca tgacctctca caagatgacc aacctcccg tggccacctt tagctctatc aatgaaaca tctgtcacga gcggtatgct tagattgacc cttgattttg cccctgagg gacggttttg ctttatggct agacaggaac ccttgcctcc attgttgtgt ctgtgacctc caagagacct tgaatgct cctgagtgtt gtagggtggg gtggggaggc ccaaatgatg gateaccatt atatttgaa agaagc</p>	Homo sapiens
				<p>LIKIFCTVKS MRNVNLFIS SLALGDLILL ITCAPVDAS YLADRWLFGF IGCKLIFFIQ LTSVGVSVFT LTALSADRYK AIVREMDIQA SHALMKICLK AAFWIISML LAIPEAVFSD LHPFHEESTN QTIFSCAPYP HSNEIHPKIH SMASFLVFYV IPLSIISVY YFIARNLIQS AYNLPVEGNI HVKKQIESRK RLAKTVLVFV GLFAFCWLPN HVIYLYRSYH YSEVDTSMILH FVTSICARLL AFTNSCVNPF ALYLKSKSR KQENTQLLCC QPGLIIRSHS TGRSTTCMTS LKSTNPSVAT FSLINGNICH ERYV</p>	
131	1814	Cholecystoki nin B Receptor	NM_000731	<p>atggagctgc tcaagctgaa ccggagcgtg cagggaacog gaccgggccc gggggcttcc A ctgtgccgc cggggggcgc tctctcaac agcagcagtg tgggcaacct cagctgcgag ccccctcgca ttccgggagc cgggacacga gaattggagc tggccattag aatcactctt tacgcaatga tcttctgat gacgtttgga ggaatatgac tcatcatcgt ggtcctggga ctgagccgcc gctgaggac tgtcaacaaat gccctctctc tctcactggc agtcagcgac ctcctgctgg ctgtggcttg catgcccctc accctctctc ccaatctcat gggcacatcc atctttggca ccgtcatctg caaggcgggt tctcatccta tgggggtgtc tgtgagtgtg tccacgctaa gcctcgtggc catcgactg gagegttaca ggcacatctg ccgaccactg caggcaacgag tgtggcagac gcgtccccc gcggtctcgc tgattgtagc cactgggctg ctgtccggac tactcatggt gccctacccc gtgtacactg tctgtcaacc agtggggcct cgtgtgctgc agtgcgtgca tgcgtggccc agtgcgctgta tggccgtggc ctggtccgta ctgtgcttc tgccttgtt cttcatcccc ggtgtggtta tggccgtggc ctacgggctt atctctcgc agctctactt agggcttcgc ttgtacggcg acagtacag cgacagccaa agcagggtcc gaaccaaagg cgggctgcca gggctgtgtc accagaacgg cggtgcccg cctgagactg gcgcggttg cgaagacagc gatggctgct acgtgcaact tccacgttcc cggcctgcc tggagctgac ggcgtgacg gctccagggc cgggatcccg ctcccggccc accagggcca agctgctggc taagaagcgc gtgtgacgaa tgttctggt gatcgtgtg ctttttttc tgtgttgtt gccagtttat agtgcaaca cgtggcgccg cttgatggc ccgggtgcac accgagcact ctgggtgtgt cctatctcct tcatcactt gctgagctac gctcggcct gtgtcaacc cctggtctac tgcctcatgc accgtcgtt tgcacaggcc tgcttgaaa cttgcgtcgc ctgtgcccc cggcctccac gagctcgccc caggctctt cccgatgagg acctccccc tccctccatt gcttcgtgt ccaggttag ctacaccac atcagcacac tgggcccctgg ctgaggagta gaggggcctt ggggtgttag gcagggcaaa tgacatgcac tgaccttcc agacatagaa aacacaaacc aaactgaca caggaaacca acacccaaag catgactaa ccccaacgac aggaaggt agctacctg acacaagg aataagaatg gagcagtaca tgggaaagga ggcagctc tgatatggga ctgagcctg cccatagaaa catgacactg accttgaga gacacagcgt ccctagcagt gaactattc</p>	Homo sapiens

132	1814	Cholecystoki nin B Receptor	NP_000722.1	MELLKNRSV QGTGPGAS LCRPGAPLIN SSSVGNLSCE PPRRGAGTR ELELAIRITL P YAVIFMSVG GNMLIIIVLG LSRLRTVTN AFLLSIAVSD LLLAVACMPF TLLPNLMGTF IFGTICKAV SYLMGVSVSV STLSVAIAL ERYSAICRPL QARVMQTRSH AARVIVATWL LSGLIMVPYP VYTVQPVGP RVLCVHRWP SARVRQTSV LLLLLFFIP GVMNAVAYGL ISRELYLGLR FDGSDSDSQ SRVRNQGLP GAVHONGRCR PETGAVGEDS DGCYVQLPRS RPALELTALT APGPGSGSRP TQAKLIAKKR VVRMLLVIV LFFLCWLPHY SANTWRAFDG PGAHRALSQA PISFIHLSY ASACVNPLVY CFMHRFRQA CLETCARCCP RPPRARPRAL PDEDPTPSI ASLSRLSYTT ISTLPGP	Homo sapiens
133	1834	Glucagon Receptor	NM_000160	ggatctggca gcgcgcgcaa gacgagcggg caccggcgcc cgaccggagc ggcaccagag A gacggcgggg agccaagccg acccccgagc agcgcgcgcg gggccctgag gctcaaaagg gcagcttcag gggaggacac cccactggcc aggaagcccc aggtcttgct gctctgccac tcagctccc tcggaggagc gtacacacac accagactgc cattgcccc gtgtgcagcc cctgccaagt gtgggaggca gctagctgcc cagagcagc ccccccctgc agceacagc acccttgctg ctgttgctgc tgcctgtggtg ctgceagcca caggtcccc cgcctcaggt gatggacttc ctgtttgaga agtggaagct ctacgttgag cagtgccacc acaacctgag cctgtgccc cctcccaagg agctggtgtg caacagaacc ttgcacaagt attcctgctg gccggacac cccgccaata ccacggccaa catctctgc ccctgtacc tgcctggca ccacaaagt caacacgct tcgtgttcaa gagatcggg cccgacggc agtgggtgag tggacccggg gggcagcctt ggcgtgatgc ctcccagtc cagatggatg gcgaggagat tgaggtccag aaggagtggt ccaagatgta cagcagcttc cagtgatgt acacagtggg ctacagcctg tccctggggg cctgtctct cgccttgccc atcctggggg gcctcagcaa gctgactgc accgcaatg ccatacagc gaatctgttt cgtctcttcg tgcgaaagc cagtcctgt ctggtcattg atggcctgct caggaccgcg tacagccaga aaattggcga cgacctcagt gtcagcact ggtcagtga tggagcgtg gctggtgccc gtgtggccgc ggtgttcagt caatatggca tegtggccaa ctactgctg cgtggtggtg agggcctgta cctgcaaac ctgctggcc tggccacct ccccgagagg agcttcttca gcctctacct gggcatggc tggggtgccc ccatgctgtt cgtcgtcccc tgggcagtgg tcaagtgtct gttcgagaac gtccagtgtt ggaacagcaa tgacaacatg ggtctctggt ggatectgct gtccccgtc ttcctggcca tctgatcaa cttcttcac ttctgcccga tctgtcagct gctcgtggcc aagctggggg cagcgcagat gcaccacaca gactacaagt tccggtggc caagtccacg ctgacctca tccctctgct gggcgtccac gaagtgtct tgccttcgt gacggacgag cagccccagg gcacctgctg ctccgcaag ctcttcttcg acctctcct cagctccttc cagggcctgc tgggtgctgt cctctactgc ttctcaaca aggaggtgca gtcggagctg cggcggcgtt ggcacgcctg gcgcctgggc aaagtgtat gggagagc gaacaccagc aaccacaggg cctcatcttc gcccgccac gcccctccca gcaaggagct	Homo sapiens

134	1834	Glucagon Receptor	NP_000151.1	<p> ggagtttggg aggggtggtg gacccagga ttcatctgag gagaccctt ggagctggtg cctccctaga ttggtgaga gccctcttg aacctgctg ggacccagc taggctgga ctctggcacc cagagcgctc gctggacaac ccgagacagc agccacagc taggctgga gggggggagc caacagcagc cccacacac cccacacccc cagtggtgct gtctcgaga ttgggctcc tctccctgca cctgcttgt cctggtgga gagtgagca gagagtcga gggggggagt ggggctgtg ccgtgaactg cgtgccagt tcccacgta tgcggcagc tcccatgtgc atggaagtgt cctccaaca taaagagctc aagtgtcac cgtg MPPCQQRPL LLLLLACQ PQVPSAQVMD FLFEKWKLG DQCHNLSLL PPTELCVNR P TFDKYSCWPD TPANTANIS CPWYLPWHK VQHFVFKRC GPDQWVRGP RGQFWRDASQ QMDGEEIEV QKAVAKMYS FQVMTVGY LSLGALLAL AILGLSKLH CTRNAIHANL FASFVLKASS VLVIDGLLRT RYSQKIGDDL SVSTWLSLSDA VAGCRVAADF MQYGVANVC WLLVEGLYLH NLLGLATLPE RSFSLYLGI GWGAPMLFV PWAVVKLFE NVQCWTSNDN MGFWILRFP VFLAILINFF IFVRIVQLLV AKLRARQMH TDYKFLAKS TLTILPLGV HEVVFATVD EHAQGLRSA KLFFDLFLSS FQGLIVAVLY CFLNKEVQSE LRRRWHWRRL GKVLWEERT SNHRASSPG HGPPSKELQF GRGGSQDSS AETPLAGGLP RLAEPPF 135 1925 Gonadotropin NM_000406 -Releasing Hormone Receptor </p> <p> ttggtgctg gtccacttac aacactttt catatttga tgcatttcca atggttatcc A tgtttgttc atttcaggca tatggccctg atcagattaa ctgacatgat gtatatgcaa agcctttga gtcttcaga aaataaatt atctattca agactgattg cttataagga acttattata gctaataag taggcacaat ttttttga atctcctag atgagtcaga acttagttt gatgtaggta aaattttat ggtcacaat ctgaggtgtg agaaaatctc tttcttgat acttatata aatagaggat ataaattt caagtctgga agtagtgaga gaagctggtg attctggaga tatagtaca gtcaaaaagg agctcaggta caggactggt ctaagctgct caagattcag gagacagcca gtacacagag agctcgagga aataacacag atatatctaa aacacttctc taaccttctg tggtaacaag ctcttaaaag gggctggatg atgtgtgtt cactttttat caccagcaaa ggtcaagata atgtatatag taaatattha gtaaccattt attaaataaa taaatattha agacagaata aacaagtata ataatgaac caataagaat gcacctcta agtcaaaaata gccacttta tccttaacat tgaactgct ttggtgctg cagaagcaaa cttgttgga ttgacaaaat caagctggtg attaaataa ttccaatgta agtcttacc gtattgatga ataactatcc agcactcacc atgaagtta aagaagcaac acagaaaaag ttcctaagt gtcccaattt gaagtatca gataacctat aaaagaacat attcatatta tactaacata aacacatata aatgcactta cagcagttac acagtattct cttcaataac tagtttctt atgcattaat gtgtaataac agcaactaca atatattgat aattataaaa accaaggcaa taatttaaaa actgattaac cgtttactc taacttaagc atggattgga tcagtaagat tgattaataa attgaatgc agtcagttg attgattcta attaaagt ttaattgtt gtagaataa tttgaagtga tatattgtc cagtgttcga gtgctcaaca gtgtgttga aaagaaaaa aagaatgtt ttgagaatgt gttaattct taagacaatg gatttaatt ggatctgtt tttcattt tctcattat cattatacat ctgtatgtt gacagaacac taactataa tagtttttag aagtggttt ttgaagttaa ttaaatcata atatcatgac tgacttttga attcaaaatt aggtgtgac tatccttct cacttaggaa gagtgtgtg aaagccagac catctgtgta ggtgtacag ttacatgtg cctcagaat ggtgttgcc tgcctgttt tagcactctg ttgattacc </p>	Homo sapiens
135	1925	Gonadotropin -Releasing Hormone Receptor	NM_000406	<p> ggagtttggg aggggtggtg gacccagga ttcatctgag gagaccctt ggagctggtg cctccctaga ttggtgaga gccctcttg aacctgctg ggacccagc taggctgga ctctggcacc cagagcgctc gctggacaac ccgagacagc agccacagc taggctgga gggggggagc caacagcagc cccacacac cccacacccc cagtggtgct gtctcgaga ttgggctcc tctccctgca cctgcttgt cctggtgga gagtgagca gagagtcga gggggggagt ggggctgtg ccgtgaactg cgtgccagt tcccacgta tgcggcagc tcccatgtgc atggaagtgt cctccaaca taaagagctc aagtgtcac cgtg MPPCQQRPL LLLLLACQ PQVPSAQVMD FLFEKWKLG DQCHNLSLL PPTELCVNR P TFDKYSCWPD TPANTANIS CPWYLPWHK VQHFVFKRC GPDQWVRGP RGQFWRDASQ QMDGEEIEV QKAVAKMYS FQVMTVGY LSLGALLAL AILGLSKLH CTRNAIHANL FASFVLKASS VLVIDGLLRT RYSQKIGDDL SVSTWLSLSDA VAGCRVAADF MQYGVANVC WLLVEGLYLH NLLGLATLPE RSFSLYLGI GWGAPMLFV PWAVVKLFE NVQCWTSNDN MGFWILRFP VFLAILINFF IFVRIVQLLV AKLRARQMH TDYKFLAKS TLTILPLGV HEVVFATVD EHAQGLRSA KLFFDLFLSS FQGLIVAVLY CFLNKEVQSE LRRRWHWRRL GKVLWEERT SNHRASSPG HGPPSKELQF GRGGSQDSS AETPLAGGLP RLAEPPF 135 1925 Gonadotropin NM_000406 -Releasing Hormone Receptor </p> <p> ttggtgctg gtccacttac aacactttt catatttga tgcatttcca atggttatcc A tgtttgttc atttcaggca tatggccctg atcagattaa ctgacatgat gtatatgcaa agcctttga gtcttcaga aaataaatt atctattca agactgattg cttataagga acttattata gctaataag taggcacaat ttttttga atctcctag atgagtcaga acttagttt gatgtaggta aaattttat ggtcacaat ctgaggtgtg agaaaatctc tttcttgat acttatata aatagaggat ataaattt caagtctgga agtagtgaga gaagctggtg attctggaga tatagtaca gtcaaaaagg agctcaggta caggactggt ctaagctgct caagattcag gagacagcca gtacacagag agctcgagga aataacacag atatatctaa aacacttctc taaccttctg tggtaacaag ctcttaaaag gggctggatg atgtgtgtt cactttttat caccagcaaa ggtcaagata atgtatatag taaatattha gtaaccattt attaaataaa taaatattha agacagaata aacaagtata ataatgaac caataagaat gcacctcta agtcaaaaata gccacttta tccttaacat tgaactgct ttggtgctg cagaagcaaa cttgttgga ttgacaaaat caagctggtg attaaataa ttccaatgta agtcttacc gtattgatga ataactatcc agcactcacc atgaagtta aagaagcaac acagaaaaag ttcctaagt gtcccaattt gaagtatca gataacctat aaaagaacat attcatatta tactaacata aacacatata aatgcactta cagcagttac acagtattct cttcaataac tagtttctt atgcattaat gtgtaataac agcaactaca atatattgat aattataaaa accaaggcaa taatttaaaa actgattaac cgtttactc taacttaagc atggattgga tcagtaagat tgattaataa attgaatgc agtcagttg attgattcta attaaagt ttaattgtt gtagaataa tttgaagtga tatattgtc cagtgttcga gtgctcaaca gtgtgttga aaagaaaaa aagaatgtt ttgagaatgt gttaattct taagacaatg gatttaatt ggatctgtt tttcattt tctcattat cattatacat ctgtatgtt gacagaacac taactataa tagtttttag aagtggttt ttgaagttaa ttaaatcata atatcatgac tgacttttga attcaaaatt aggtgtgac tatccttct cacttaggaa gagtgtgtg aaagccagac catctgtgta ggtgtacag ttacatgtg cctcagaat ggtgttgcc tgcctgttt tagcactctg ttgattacc </p>	Homo sapiens

136	1925	Gonadotropin NP_000397.1 -Releasing Hormone Receptor	aatacacaaa acaagtgtaac ctttgatctt tcaattaag tatctcagg acaaaatttg acatacgtct aaacctgtga cgtttccatc taaagaaggc agaataaaa catggacttc agattcggtt acaataaat atcagatga ccagagacac aagcttgaa tctctgtct gggaaatat ggaacacagt gcctctctg aacagaatca aatcacgtg tcagccatca acaacagcat cccactgatg cagggaacc tcccactct gacctgtct ggaagatcc gagtgcggt tactttctt cttttctgc tctctgcag cttbaatgct tctttctgt tgaacttca gaagtggaca cagaagaaag agaaaggaa aagctctca agaatgaagc tgctcttaa acatctgacc ttagccaacc tgttgagac tctgattgc atgccactgg atgggatgtg gaacattaca gtccaatggt atgtcggaga gttactctgc aagttctca gttatctaaa gctttctcc atgtatgcc cagccttcac gatgtggtg atcagcctgg accgtccct ggctatcac aggccctag ctttgaagc caacagcaa gtcggacagt ccatggttg cctggcctg atctcagta gtgtcttgc aggccacag ttatacatc tcaggatgat tcatctagca gacagctctg gacagacaaa agtttctct caatgtgtaa cacactgacg tttttcaca tgggtgcac aagcatttta taacttttc acctcagct gcctctcat catcctctt tcatcatgc gacctcac aactacaact gaacagatc atctcacc tgacacgggt ccttcacag gacccacag aactacaact gaacagatc aagaacaata taccagagc acggtgaag actctaaaa tgcaggttgc attgccact tcatttactg tctgtggac tccctactat gtctaggaa ttgtgtattg gttgatccct gaatgttaa acaggtgtc agaccagta aatcacttct tcttctctt tgcctttta aacctatgct ttgatccact tatctatgga tattttctc tgtga	Homo sapiens
137	1945	Opsin, green-sensitive	MANASPEQN QNHCSAINNS IPLMQNLPT VTFFLLSA TFNASFLKL P QWTKKEKG KKLSRMKLL KHLTLANLE TLIVPLDGM WNITVQWYAG ELICKVLSYL KLFSMYAPAF MMVVISLDRS LAITRPLALK SNSKVQSMV GLAWIISVFE AGPOLYIFRM IHLADSSGQT KVFSQCVTHC SFSQWQHAF YNFTSCLF IIPLFMLIC NAKIIFTLTR VLHQDPHELQ LNQSKNIPR ARLKTLKMTV AFATSTVCW TPYYVLGIWY WFDPEMLNRL SDPVNHFFFL FAFLNPCFDP LIYGYESL atggccacgc agtggagcct ccaaggctc gcaggccgcc atccgagga cagctatgag A gacagcacc agtccagcat cttcacctac accaacagca actccaccag aggcccttc gaagcccgga attaccacat cgtccccaga tgggtgtacc acctcaccag tgtctggatg atcttttgg tcatgtatc cgtttcaca aatggcttg tctggcggc caccatgaag ttcaagaagc tgcgccacc gctgaactgg atcctgtga acctggcgt cgtgacctg gcagagaccg tcatgcacc cactatcac gttgtgaacc aggtctatgg ctactcgtg ctgggccacc ctatgtgtt cctggaggc tacaccgtct cctgtgtgg gatcacaggt ctctgtctc tggccatcat tctcgggag agatgatgg tggctgcaa gcccttggc aatgtgatg ttgatgcaa gctggccatc gtggcattg ccttctctg gatctgggt gctgtgtgga cagcccgcc catcttgggt tggagcaggt actgccccca cggcctgaag acttcacgag gccagacgt gttcagcggc agctcgtacc ccgggtgca gcttaccatg attgtctca tggtcacctg ctgcatcac ccactcagca tcatcgtctg ctgtacctc caagtgtgc tggccatccg agcgggtgga aagcagaga aagatctga atccaccag aaggcagaga aggaagtgc gcgcatggtg gtggatggtg tctggcatt tcttctctg tggggaccat agccttctt cgcattgctt gctgtgcca acctggcta cccctccac	Homo sapiens

138	1945	Opsin, green- sensitive	NP_000504.1	<p> cctttgatgg ctgcccctgg ggccttcttt gccaaaagt ccaatatcta caaccccggt atctatgtct ttatgaacgg gcagtttcga aactgcatct tgcagctttt cgggaagaag gttgacgatg gctctgaact ctccagcgcc tccaaaacgg aggtctcatc tgtgtcctcg gtatgcctg catga MAQWLSLQRL AGRHPQDSYE DSTOSSIFTY TNSNSTRGPF EGPVHYIAPR WYVHLTSVMM P IFVVIASVFT NGLVLAATMK FKKLRHPLNW ILVNLAVADL AETVIASITIS VVNQVYGYFV LGHPMCULEG YTVSLCGITG LWSLAIISWE RMWVCKPFG NVREDAKLAI VGIAFSWIWA AVWTAPPIFG WSRYPHGLK TSCGPDVFSG SSYPGVQSVS IVMVTCCIT PLSIIVLCYL QWLAIRAVA KQKSESTQ KAEKEVRMV VMVLAFCFC WGPYAFFACE AAANPGYPFH PLMALPAFF AKSATIYNPV IYVENNRQFR NCILQLFGKK VDDGSELSSA SKTEVSSVSS VSPA </p>	Homo sapiens
139	1951	Growth Hormone Secretagogue Receptor	NM_004122	<p> atgtggaacg cgagcccgag cgaagagcgg ggttcaacc tcacactggc cgactggac A tgggatgctt cccccggcaa cgactcgctg ggcagcagc tgcgtcagct ctcccccg ccgctgctgg cgggcgtcac agccactgc gtggcactct tcgtggtggg tatcgctggc aacctgtca ccatgctgtt ggtgtcgcgc ttcgcgcgc tgcgcaccac caccacctc tacctgtcca gcattggcctt ctccgatctg ctcatcttcc tctgcattgc cctggacctc gttcgcctct ggcagtacgg gccctggaac ttgcgcgacc tcctctgcaa actcttccaa ttcgtcagtg agagctgcac ctacgccag gtgtccacca tcacagcgt gagcgtcag cgtaacttcg ccaatgctt cccactccgg gccaaagtgg tggcaccaa gggcggggtg aagctggtca tcttcgtcat ctgggcctg gccttctgca gcgcggggcc catcttcgtg ctagtgggg tggagcacga gaacgcacc gaccttggg acaccaaga gtgcgcccc accgagttg cggtcgctc tggactgctc acggtcatgg tgtgggtgc cagcatctc ttctcttc ctgtctctg tctcagctc ctctacagtc tcacagtcg gaagctgtgg cggaggggc gcggcgatgc tgtctgggt gcctcgctca gggaccagaa ccacaagcaa accgtgaaaa tgcgtgggtg gtctcagcgc gcgtcaggc ttctctcgc ggtctctatc ctctccctgt gccttctccc ttctctctga MNATPSEEP GFNLTLADLD WDASPNDSL GDELLQLFPA PLLAGVTATC VALFVVGIAG P NLTMLVVR FRELRRTTNL YLSSMAFSDL LIFLCPLDL VRLWQYRPWN FGDLLCKLFQ FVSECTYAT VLTITALSVE RYFAICFPLR AKWVTKGRV KLVIWIVAV AFCAGPIFV LVGVEHNGT DPWDTNECRP TEFAVRSGLL TMWVSSIF FFLPVFCLTV LYSILGRKLW RRRGDAVVG ASLRDQNHKQ TVMLGGSQR ALRLSAGPI LSLCLLPSL </p>	Homo sapiens
140	1951	Growth Hormone Secretagogue Receptor	NP_004113.1	<p> agcagccaa gcttaactgag gctggtggag ggagccactg ctgggctcac catggaccgc A cggatgtgg gggccacgt cttctcgtg ttgagccgt taccgacctg attggccac atgcacccag aatgtgactt catcaccag ctgagagagg atgagagtgc ctgtctacaa gcagcagagg agatgccaa caccacctg gctgacctg cgacctggga tgggtgctg tgctggccaa cggcaggtc tggcagatgg gtccacctc cctgcccga ttcttctct cacttcagct cagagtcagg ggctgaaa cgggattgta ctatactgg ctggtctgag ccctttccac cttaacctgt ggcctgcct gtgcctctgg agctgctggc tgaggaggaa tcttacttct ccacagtga gattatctac accgtgggccc atagatctc tatttagcc ctcttcgtgg ccataccat cctggttct ctcaggaggc tccactgcc ccggaactac gtccacacc agctgttcac cacttttacc ctcaaggcgg gacgtgtgtt cctgaaggat </p>	Homo sapiens
141	1954	Growth Hormone- Releasing Hormone Receptor	NM_000823		Homo sapiens

142	1954	Growth Hormone-Releasing Hormone Receptor	NP_000814.1	MDRRMGAHV FCVLSPLPTV LGHMPECDF ITQLREDESA CLQAEEMPV TILGCPATWD P GLLCWPTAGS GEWTLPCPD FFSHSESG AVKRDCITG WSEPPFPYV ACPVLELLA EESYFSTVK IITYVGHSTS IVALFVAITI LVALRRLHCP RNYVHTQLFT TFIKAGRVF LKDAALFHSD DTDHCSFSTV LCKVSVAAASH FATMNFWSL LAEAVYLNCL LASTPSSRR AFWLVLWAG GLPVLFTGW VSKLAFEDI ACWLDDTSP YWMIKGPV LSVGVNFGLE LNIIRILVRK LEPAQSLHT QSQYWRLSKS TFLFLPLFGI HYIIFNLPD NAGLGIRLPL ELGLGSFQGF IVAILYCFLN QEVRTEISRK WHGHDPPELLP AWRTRAKWTT PPSRAAKVLT SMC	Homo sapiens
143	2120	Histamine H1 Receptor	NM_000861	caggagagaca tacaggattt aagaagccca tcatggagaa gaccttcaat tacagagata A aaaagtittt cttgtggaac aagttaaacac tagatggcag ataacagact gagagtgag ctgcttctga ctgcatttaa aaggagtgga gccataactg gcgctgctc ttcgccaat gagctcccc aattctctt cctctttaga agacaagatg tgtgaggga acaagaccac tatggccagc cccagctga tgcctctggt ggtggtcctg agcactatct gcttggctac agtagggctc aacctgctg tgcgtgatgc cgtacggagt gageggaagc tccacactgt ggggaacctg tacatgta cctctcgtt ggcgacttg atcgtgggtg ccgtgctcat gcctatgaac atccttacc tgcctatgc caagtggta ctggccctc ctctctgctt ctttggctt tccatggact atgtggccag cacagctcc atttcaagt tcttctctt gtgcattgat cgtaccgt ctgtccagca gcccctcagg taccttaagt atcgatacaa gaccgagcc tcggccacca ttctgggggc ctggtttctc tctttctgt ggttatctc cattctaggc tggatcaact tcatgcagca gacctgggtg cgccgagagg acaagtgta gacagactc tatgatgta cctgggttcaa ggtcatgact gccatcata acttctacct gccacactg ctcatgctt ggttctatgc caagatctac aaggccgtac gacaacactg ccagaccgg gagtcatca ataggtccct ccttctctc tcagaaatta agctgaggcc agagaacccc aaggggagt ccaagaaacc agggagaggag tctcctctggg aggttctgaa	Homo sapiens

aaggaagcca aaagatgctg gtgtggatc tgtttgaag tcaccatccc aaacccccaa
ggagatgaaa tccccagttg tcttcagcca agagatgat agagaagtag acaactcta
ctgtttcca ctgtatattg tgcacatgca ggtcgcgga gaggaggta gcaggagcta
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tggggccagc gagatatcag aggatcagat gttagttgat agccaatcct tctctgaac
ggactcagat accaccacag agacagcacc aggcaaaagg aaattgagga gtgggtctaa
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tgtatctggg ttgcacatga accgcgaaag gaaggccgc aaacagttgg gttttatcat
ggcagccttc atcctctgct ggatccctta tttcatcttc ttcattggtca ttgccttctg
caagaactgt tgcattgaac attgcacat gttccacctc tggctgggct acatcaactc
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aatctgcat attcgtcctt aaggaggct ctgaggggat gcaacaaaat gatccttatg
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tctggaatcc aaaccacagt cttaggggct tggtagtttg gaaagtctt aggcaccata
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ataaaagaga gagagaatca gacctgggtg gaactcctc gctcctcagg aactatggga
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tataactgtg cagagacttt atccatgcca atagtgtctg tccccttcca ggggtcacct
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agctcaaaat gatattgttg agtagacgaa cagctgacat ggagtcccc tgacctacg
gaaggggacg ctttgaagga accaagtga tttttatctg tgaattctgt tgtgttgc
aaaaagtc atgtaatctt catagccata cctggtgagc aaaaactagt aaagacatag
gaacatgtag ttttacttgg tgttatgtt gcaatctggt tgtgatttat attttaaagc
ttggtgctaa accacaatat gtatagcaca tggagtgcct gtacaagctg atgttttga
ttttgtgtc ctctttgcat gatctgtcaa agtgaagatat ttttacctgc ctaaaatatg

144	2120	Histamine H1 NP_000852.1 Receptor	atgtttaaaa gcataactcta tgtgatttat ttattctac cttcttgagt cttctggact aagaagatgt tttagaatgt accatcaaat gtttaacagag tttagatatgg gctttctctt tggtttctca tcacatttgt aatgtcttt tcaaaaggat ttacttttg taaaaagctt cattctact ctgttttga tccccaaac ttctgttca aaacggggg agtttaggag actttaatcc cggtttcaga agtgcagct ggtctgttcc caggtcagaa accattgttc agaagacctc cctgtgagag agtgcctct caggtctcct caggaccaaa gaacactga aaagagcact tcacacagac aagtggctaa gtgtccatta tttaacttga acaatcaag caactagtgg agagaactga ttgtgagctc MSLPNSCLL EDKMCENKT TMASPOLMPL VVLSSTICLV TVGLNLLVY AVRSERKLHT P Homo sapiens
			VGNIYIVSL VADLIYGAIV MPNNIYLIM SKWSLGRPLC LFWLSNDYVA STASIESVFI ICIDRYRSVQ QPLRYLKVRT KTRASATILG AWFLSFLWVI PILGNWHEMQ QTSVRREDKC ETDFYDVTF KMTALINFY LPTLLMLWFY AKIYKAVRQH CQRELINRS LPSFSEIKLR PENPKGDAKK PGKESPEVL KRPKDAGGG SVLKSPSQTP KEMKSPVVS QEDDREVDKL YCFPLDIVHM QAAEGSSRD YVAVNRSHGQ LKTDEQGLNT HGASEISEDQ MLGDSQSFSR TDSDTTETA PGKGLRSGS NTGLDYIKFT WKRLRSHSRQ YVSGLHMNRE RKAQQLGFI MAAFILCWIP YFIFFMVIAF CKNCNEHLH MFTIWLGIYN STLNPLIYPL CNENFKKTFK RILHIRS
145	2121	Histamine H2 NM_022304 Receptor	ctctgcccct ccactgactc cagagaggga gatccccagt acttgactcc atcacgaga A tgggagcagg caccagctat ggagagggat acagctgcgt ctccacatga cccatctctg atgacaccaa agccacgcc agacagtgc tcgattctta tgcaaaacct gggaagcggga gacctacccc agcccggga ggaagctagc tcttcagggg accgtctgag gactggagtt tgatccatga acctgcttc gaggccttgc tttctctct tcttcattca tattcattcc caacacctta gaaggtgttg cttaatttat ttctagaaaa gcagcccaga gtcagtcat gaagccctcc ccacccctg gccaaaaaa aaaaaaaa aaaaactggac acatttggg tctgttggga gcttgagatc cagtgttgg catagtgtgc acattgggag cagagaagaa gcaaccaggg gccctgatca ggggactgag ccgtagagtc ccaggatggc acccaatggc acagcctctt ccttttgcct ggactctacc gcctgcaaga tcaccatcac cgtgtctctt gcgtctctca tctctatcac cgttctggc aatgtgttgc tctgtcttgc cgtgggcttg aacgcgggc tccgcaacct gaccaattgt ttcatcgtgt ccttggctat cactgacctg ctctcggcc tctgtgtgt gccctctct gccatctacc agctgtcctg caagtggagc tttggcaagg tcttctgcaa tatctacacc agcctggatg tgatgtctg cacagcctcc attcttaacc tcttcatgat cagctcgac cggtaactgc ctgtcatgga cccactgcgg tacctgtgc tggtaacccc agttcgggtc gccatctctc tggcttaat ttgggtctac tcattaccc tgcctttct gtctatccac ctggggttggga acagcaggaa cgagaccagc aagggaatc ataccactc taagtcaaa gtccaggtca atgaagtga cgggctgggtg gatgggctgg tcaccttcta cctccgcta ctgactatgt gcatcaccta ctaccgcatc ttcaaggtcg cccgggatca ggccaagagg atcaatcaaa ttatgtcctg gaagcagcc accatcaggg agcaaaaagc cacagtaca ctggcgccc tcatggggc cttcatcatc tgtgtgttc cctacttcac ggcgtttgtg taccgtgggc tgagagggga tgatgccatc aatgaggtgt tagaagcoat cgttctgtgg ctgggctatg ccaactcagc cctgaacccc atcctgtatg ctgcgctgaa cagagacttc cgcacccgggt accaacagct cttctgtctg

146	2121	Histamine H2 Receptor	NP_071640.1	<p>aggctggcca accgcaact ccacaaaact tctctgaggt ccaacgcctc tcagctgtcc</p> <p>aggacccaaa gccgagaacc caggcaacag gaagagaaac ccctgaagct ccaggtgtgg</p> <p>agtgggacag aagtcacggc ccccagga gccacagaca ggtaatagcc ctgcccattg</p> <p>gtgcacagga tgggggcaat gggaggggat gctactagat ggaatgatta agggagctgc</p> <p>tgcttagtg gtgctggttt atgtctagg aactcttcag gacactttg taaacacctt</p> <p>cttgcttaat ctcccaacg gccccaag gtagaactta gctccctttt aaaaggagca</p> <p>cattaaaatt ctcagaggac tggcaaggg ccgcacagct ggggcat</p> <p>MAPNGPASF CLDSTACKIT ITWLVAVLIL ITVAGNVAVC LAVGNRRLR NLNCFIVSL P</p> <p>AITDLLGLL VLPFSAYQL SCWSEKVF CNIYSLDVM LCTASILNF MISLDRYCAV</p> <p>MDPLRYPVLV TPVRVAISLV LIWVISITLS FLSIHGWS RNESKGNHT TSKCKVQVNE</p> <p>VYGLVDGLVT FYLPLLMCI TYRIFKVAR DQAKRINHIS SWKAATIREH KATVTLAAVM</p> <p>GAFIICWFPY FTAIFYRGLR GDDAINEVLE AIVLWLYAN SALNPILYAA LNRDFTGYQ</p> <p>QLFCCRIANR NSHTSLRSN ASQLSRTQSR EPRQEEKPL KLQWSGTEV TAPQATDR</p>	Homo sapiens
147	2783	Opioid Receptor, kappa 1 (OPRK1)	NM_000912	<p>tcagcaact accatgaat ccccgattca gatctccgc ggggagcctg gccctacctg A</p> <p>cgccccgagc gctgctctgc ccccacacag cagcgctcg tttccggctt gggcggagcc</p> <p>cgacagcaac ggcagcgccg gctcgaggga cggcgagctg gagccgcgc acatctcccc</p> <p>ggccatcccc gtcacatcva cggcggtcta ctcgtagtg ttcgctggtg gcttggtggg</p> <p>caactcgtg gtcacatctc tgatcatccg atacacaaag atgaagacag caaccaacat</p> <p>ttacataatt aacctggctt tggcagatgc tttagttact acaacctgc ccttcagag</p> <p>tacggtctac ttgatgaatt cctggccttt tggggatgtg ctgtgcaaga tagtaatttc</p> <p>cattgattac tacaacatgt tcaccagcat cttcaccttg accatgatga gcgtggaccg</p> <p>ctacatggc gttggccacc cgtggaaggc tttggacttc cgcacacctt tgaaggcaaa</p> <p>gatcatcaat atctgcatct ggtgctgtc gtcacatggt ggcactctc caatagtcct</p> <p>tggaggcacc aaagtccagg aagacgtcga tgcattgag tgctcctgc agttcccaga</p> <p>tgatgactac tccgtggtgg acctcttcac gaagatctgc gcttcatct ttgccttcgt</p> <p>gacccctgc ctcatcatca tcgtctgcta caccctgatg atcctgcgtc tcaagagcgt</p> <p>ccggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt</p> <p>cctggtggtg gtggcggttt tcgtgctctg ctggactccc attacatat tcactctggt</p> <p>ggaggctctg gggagcaact cccacagcac agtgccttc tccagctatt acttctgcat</p> <p>cgcccttagc tataccaaca gtagcctgaa tcccattctc tacgctttc ttgatgaaaa</p> <p>cttcaagcgg tgttccggg acctctgctt tccactgaag atgaggatgg agcggcagag</p> <p>cactagcaga gtccgaata cagttcagga tccctgttac ctgagggaca tcgatgggat</p> <p>gaataaacca gtatgactag tcgtggagat gtcctcgtac ag</p> <p>MESPIQIFRG EPGTCAPSA CLPPNSAWF PGWAEFDSNG SAGEDAQLE PAHISPAIFV P</p> <p>IIITAVSVVF VVGLVGNLSV MFVIIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL</p> <p>MNSWPFQDVL CKIVISIDY NMFTSIFTLT MMSVDRIYAV CHPVKALDFR TPLKAKIINI</p> <p>CIWLLSSVG ISAILGGTK VREDVDIEC SLQFPDDDDYS WWDLFMKICV FIFAFVLPVL</p> <p>IIIVCYTIMI LRLKSVRLS GSREKDRNLR RITRVLIVV AVFVVCWTPPI HIFILVEALG</p> <p>STSHSTAALS SYFICIALGY TNSSINPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV</p> <p>RNTVQDPAYL RQIDGMNKPV</p>	Homo sapiens
149	2964	Luteinizing	NM_000233	<p>ggccgcccac gaagcagcgg ttctcggcgc tgcagctgct gaagctgctg ctgctgctgc A</p>	Homo

sapiens

Hormone/Chor
iogonadotrop
in Receptor

agccgcgcgt gccacgagcg ctgcgcgagg cgctctgccc tgagccctgc aactgcgtgc
ccgacggcgc cctgcgctgc cccggcccca cgcccggtct cactcgacta tcaattgcct
acctccctgt caaagtgtac ccactcgaag ctttcagagg acttaatgag gtcataaaaa
ttgaaatctc tcagattgat tccctggaaa ggtagaagc taatgccttt gacacacctc
tcaattgtc tgaataactg atccagaaca ccaaaatct gagatacatt gagcccgag
catttataa tcttcccgga ttaataact tgagcatctg taacacaggc atcagaaagt
ttccagatgt tacgaagggtc tctctctctg aatcaaatct cattotggaa atttgtgata
acttacacat aaccaccata ccaggaaatg cttttcaagg gatgaataat gaatctgtaa
cactcaact atatggaat ggatttgaag aagtacaaa tgatgcattc aatgggacga
cactgacttc actggagcta aggaaaaacg tacatcttga gaagtgcac aatggagcct
tccgtgggc cacaggcccg aaaacctgg atatttctc caccaaattg caggccctgc
cgagctatgg cctagatgcc attcagaggc taattgccc gtcactctat tctctaaaa
aatggcacc aagagaaca ttgtcaatc tccctggagg cagtttgact taccacagcc
actgctgtgc ttttagaac ttgcaaca aagaacagaa ttttcacat tccatttctg
aaaaatttc caacaatgt gaaagcacag taaggaaaagt gactaacaac acatttatt
cttccatgct tgcctgaggt gaactgagtg gctgggacta tgaatatggt tctgctttac
ccaaagacc ccgatgtgct cctgaaccag atgcttttaa tccctgtgaa gacattatgg
gctatgactt ccttaggggc ctgatttggc tgattaatat tctagccatc atgggaaaca
tgactgttct ttttgttctc ctgacaagtc gttacaaact tacagtgcct cgttttctca
tgtgcaatct ctccttttga gacttttga tgggctctc tctgctctc atagcctcag
ttgattccca aaccaagggc cagtactata accatgccat agactggcag acagggagt
ggtagcgcac tgcctgcttt ttcactgtat tgcgaagtga actttctgtc tacacctca
ccgtcatcac tctagaaga tggcacacca tcaacctatgc tattcacctg gacaaaaagc
tgcgattaaag acatgccatt ctgattatgc ttggaggatg gctcttttct tcttaattg
ctatgttggc ccttgcgtgt gtcagcaatt acatgaaggt cagtatttgc tccccatgg
atgtggaac cactctctca caagtctata tattaacat cctgattctc aatgtggtgg
ccttctcat aattgtgct tgctacatta aaatttattt tgcagttcga aaccagaaat
taatggctac caataaagat acaagattg ctaagaaaaat ggcatactc atctcacccg
atttcacctg catggcaact atctctttt ttgccaatc agctgcctc aaagtacctc
ttatcacagt aaccaactc aaagtcttctc tggttctttt ttatccatc aattcttctg
ccaatccatt tctgtatgca atattoacta agacattcca aagagatttc tttctttgc
tgagcaaat tggctgctgt aaactcggg ctgaacttta tagaaggaaa gattttcag
cttacacctc caactgcaa aatggcttca ctggatcaaa taagccttct caatccacct
tgaagtgtc cacattgcac tgcagggta cagctctcct agacaagact cgtacacag
agtgttaact gttacatcag taactgcatt attgaattgt tcttaaacct gtaaaaaaa
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gtacattagg caagagacct ctacctagta gaaagtgtag tctatgacca ctgccaacg
taaaaaactat ttgtcattgt tacatggcat aaatatgaag ttgagagtgt ttagaattt
ttatagaat tttagacag taattttgt ttatgaatct tttaaaaaac agaggaggta
tttgcataat ctttttttca ttttcgtaat ttgtatgca tctataaaa atattagttc
ataacagatc agaaatttaa aataaggggc tttttcttca ggtagtttga aaacacact

150	2964	Luteinizing NP_000224.1 Hormone/Chor iogonadotrop in Receptor	ctagagatgc actgttcaat tcggtacgca ctaggacacat gtggtataat taaaattaaa taaaatgaga aatgtagtgt ctacgttgca ctacgtttca agttctcaat ggctacgtca agttctcaat ggctacgtgt gactagtgt taccatagt gacagcacag acacagaata ttttcatcac cacagaaagt tctatctgtt ctattataga gacttttat tatgccctat ctggattcta cttattata atttaaggta aacatctgaa agcacatttc agctattttg cttagtgaac cattaaagt tagactgaa actctctgt agtaggaacc ctgtctcagt gcattttgtt ttctgtcttc ctactcaag atcttggaac tggtaacata caaatgtgct gagttagaat tactctgaag ttatgaaca tataatgaaa acaatttttc cggcc VKVIPSQAFR GINEVTKIEI SQIDSLERIE AFANFNLLN SEILLQNTKN LRYIEPGAFI NLPGLKYLSI CNTGIRKFPD VTKVFSSEN FILEICDNLH ITTIPGNAFQ GNNESVTLK LYNGGFEEVQ SHAFNGTTLT SLELKENVHL EKMHNAGFRG ATGPKTLDIS STKLQALPSY GLESIQRLIA TSSYSLLKLP SRETFWNLE ATLTPSHCC AFRNLPTKEQ NFSHSISENF SKQCESTRK VSNKTLYSSM LAESELGWD YEYGFCLPKT PRCAPEPDAF NPCEDIMGYD FLRVLWLIN IIAIMGNTV LFLVLFTRYK LTVPRELMCN LSFADFCMGL YLLLIASVDS QTKGOYNHA IDWQTSGCS TAGFTVFAS ELSVYTLTVI TLERWHTITY AIHLQKRLRL RHAILMLGG WLFSSLIAML PLVGSVNYMK VSICFPMDVE TTLSQVYILT ILILNVVAFF IICACYIKIY FAVRNPELMA TNKDTKIAKK MAILFTDFT CMAPISSFFAI SAAFKVPLIT VTNSKVLVL FYPINSCANP FLYAIFTKF QRDFFLLLSK FGCKRRRAEL YRRKDFSAYT SNCKNGFTGS NKPSQSTLKL STLHCQGTAL LDKTRYTEC	Homo sapiens
151	2976	Lysophosphat NM_001401 idic Acid Receptor Edg2	acggcgcgct gggctcacac tgtccgcgcg cggacgggct ttgtggttg gggcgcgctg A gcgagtgcga gtgagagtgt gggcgcgcg cgtggtggcg ggcgcgggtg ggtggccgtg cgttcttgcg agccggcctg caggagcgca ggctcccgcg ccctcccgca cccagcgcg gaccgagccc ctggaggga gtgcccgcag ccgcccggcg cgccggccct cctgtccgcg gccaggtaca cagcttctcc tagcatgact tcatgactgac cagcaaaaca gaaaatttgt ctcccgtagt tctggggcgt gttcacacc tacaaccaca gagctgtcat ggctgccatc tctacttcca tccctgtaat ttacagccc cagttcacag ccatgaatga accacagtgc ttctacaacg agtccattgc cttcttttat aaccgaagt gaaagcatct tgccacagaa tggaacacag tcagcaagct ggtgatggga cttggaatca ctgtttgtat cttcatcatg ttggccaacc tattggtcat ggtggcaatc tatgtcaacc gccggttcca tttctctat tattacctaa tggctaactc ggctgtgca gacttctttg ctgggttggc ctactctat ctcatgttca acacaggacc caatactcg agactgactg ttagcacatg gctcctgcgt cagggcctca ttgacaccag cctgacggca tctgtggcca acttactggc tattgaatc gagaggaca ttacggtttt ccgcatgcag ctccacacac ggaatgagca ccggcggtga gtgggtgtca ttgtgtcat ctggactatg gccatgta tgggtgctat acccagtgtg ggctggact gtatctgtga tattgaaat ttgtcaaca tggcaccct ctacagtgc tcttacttag tctctgggc catttcaac ttgtgacct ttgtgtaat ggtggtctc tatgtcaca tcttggcta tgttcggcag aggaatga gaatgtctg gcatagtct ggaccccgcc ggaatcgga taccatgat agtcttctga agactgtggt cattgtgctt ggggccttta tcatctgtg gactcctgga ttggttttgt tactctaga cgtgtgctgt ccacagtgcg acgtgctggc ctatgagaa ttcttctctc tcttgcctga attcaactct	Homo sapiens

152	2976	Lysophosphatidic Acid Receptor Edg2	NP_001392.1	<p>gccatgaacc ccataattta ctctaccgc gacaaagaaa tgagcgccac ctttaggcag atcctctgct gccagcgag tgagaacccc accggcccca cagaaggctc agaccgctcg gcttcctccc tcaaccacac catcttggtt ggagttcaca gcaatgacca cctgtgtggtt tagaacggaa actgagatga ggaaccagcc gtctctcttt ggagatataa cagctccccc ctaccaaat gccagggcaa ggtgggtgtg gagagaggag aaagtcacac tcatgtactt aaacactaac caatgacagt attgttctt ggacccaca agacttgata tatattgaaa attagcttat gtgacaacc tcatcttgat ccccatccct tctgaaagta ggaagttgga gctcttgcaa tggaaattcaa gaacagactc tggagtgtcc atttagacta cactaaactag acttttaaaa gattttgtt ggttgggtgc aagtcagaaat aaattctggc tagttgaatc cacaacttca ttatataca ggttcccttt tttattttt aaagatacag tttcacttaa taaacagttt tatgcctatc agcatgtttg tgatggatga gactatggac tgccttttaa ctaccataat tccattttt cctttacata ggaactgt agttggaat tatcttttgt ttagaagca tgcgtgaat gtatgtatgc agtatgctt acttaaaaag attaaaagga tactaatgtt aaatcttcta ggaatagaa cctagacttc aaagccagta tttgttagg tcatgaagca acaatgctc taatcacaat attaaactgt taattaaaat gttgtaacaa aagatgaagc actataatat tgttccata tatttaaaat acccaagtac attctaatta ccagtataatc agaggaaaat tttcgtatgc tttgtaaaat aatatactca tcatagaaa cttgaaaaat gcagaaatgt ataaaaagc aaaaatgatt actgataata tcaaaccca gaagtaacca cctttaaaaa gcaaccccca tgcgtgccta tatgtgtatt gtatactttt ttacataat tggagtcata ctgtaaacag tttataaagt agatcttttt cattgcaaaa ttgccacatt tcttkatggc attaaaaat ttacaaaaat ataattttta tggctatatt atattccatt taatggatgc aactcagttt atttaaccat tcccagttg ttaactattt aggttgttc taattttcat tattataag ttgcagaaat ttggtgt</p>	Homo sapiens
153	3038	G Protein-Coupled Receptor MRG	S78653	<p>IFIMLANLLV MVAIVNRR HFPIYILMAN LAAADFFAGL AFYLFMTGT PNTRLTVST WLLRQGLIDT SLTASVANLL AIAIERHIV FRMLHTRMS NRRVVVVIV IWTMAIVMGA IPSVGNWNCIC DIENCSNMAP LYSDSYLVFW AIFNLVTFVV MVLVYAHIFG YVRQTMMS RHSSGPRNR DTMSLLKTV VIVLGAFIIC WTPGLVLLLL DVCCPQCDVL AYEXFFLLLA EFNSAMNP11 YSYRDKEMSA TFRQILCCQR SENPTGPTES SDRSASSLNH TILAGVHSND HSV</p>	Homo sapiens

154	3038	G Protein- Coupled Receptor MRG	AAB21255.1	<p> aaaaaaaaa aaaaagaga tgagacacta gtgtctcatg agtagaacct ggaccagaca caaatctcca ttccaatgt ttagtgctc attagtccc aacaacaaga tattgggtct atgtggtag gctggggca tctgtacaa cagagatgt gtagggag ggagaacaga tcacaaatc atgagagct attgacag catatactcc catccactct gatatgagt taatgttcag ctgttcttaa aaagcacacc caacaatgg tgttctattc cagcctagga aaatgtagag gcaaggggtc tgaggccaga ggacaccact agatggacca ctgctctga ctgtgatgt gtgcccact caggtcccag caccocatgt tctgggggaa aattgctgg ttcagccaga gggctggatg gacagtgtt gctgagtcac agatatctct ctcatgtagc cttctctcc acagtgtga ccaggagga cagaacccaa acctggtatc teagctctgt ggcgtcttc tcaaaatga gacgaatga accatacata tgcagatgag catggcagt ggacagcagg cctgcccctt gaatacatt gcccacaagg ctgtgctgtt ctccctgt gggtctttat tgaatggcac tgtctcttgg ctgcttctgt gtggggccac gaatccctac atggtataca tctccacct ggtcgtctgt gacgtgatct atcttctgt ctggcagt gggtctttac agtgactct gtaacttat catggagtgc tgtttttat cctgattc ctggccatat tgtctcctt ctcttttgg gtgtgtctct gtctctgtt ggcacatcagc acagagcgtt gtgtgtgtgt cctctccc atctgttaca gatccacccg cccaaaatac acatctaag ttgtctgcac cctcatctgg ggcctgcctt ttgcatcaa catagtaaaa tcactttcc taacttactg gaaacatga aagcatgtg tcataattct aaagcttct ggcctcttc atgtatctct tcaacttgg atgtgtgtg cagctctgac tctactcatt agattcctgt gctgtccca gcagcaaaa gccaccagg tctatgcgtt ggtgcagatc tcggccccc ttgtctact ctggccccta ccttgagctg tggaccctc catacagat ttcaaatgt ttgtcaccac ctctattta attctctgt tctcattat aacacagcagc gcaaaccta tcatttattt ctttgtggg agcctcagaa agaaaggct gaaggaaatc ctcagatga ttctcaacg ggcgttagca gataagccag agtggggag gaacaaaag gcagctggca tgcaccaat ggagcaacca cactactc agcatgtgga gaacttct cccaggagc acagggtcga tgtgaaaca taatttccc catctgagct ggggaattgt acacatagta accagcctg ttctgcatca taaggctgt gcatacaatc aatgctttat tctaataag ttcagcttcc atggacttcc aaacaaccc ctgctgttt gtggttgaa gagacattaa ctctctctt aggcagtaag cccagtttga atgtgtcca gttccaaag tgaggggaat gggaccaggt gagacttcc tggtaacctg ggaatccaaa taaagacct acaaaggcat gaattc </p>	Homo sapiens
155	3057	Melanocortin 3 Receptor (MC3R)	NM_019888	<p> atgagcatcc aaaagaagta tctggaggga gatttctct tctctgtgag cagcagcagc A ttcctacgga cctctgtgga gcccagctc ggatagccc ttctgacagc aatgaatgct tcgtgtgccc tgcctctctgt tcagccaaca ctgcctaagt gctcggagca cctccaagcc </p>	Homo sapiens

156	3057	Melanocortin NP_063941.1 3 Receptor (MC3R)	<p>cctttcttca gaaacacagag cageagcgcc ttctgtgagc aggtcttcat caagccccgag atcttctgt ctctgggcat cgteagtcgt ctggaataa tcttggttat cctggccgtg gtcaggaacg gaaacctgca ctcccgatg tactcttctc tctcagcct ggcgtgtgccc gacatgctg taagtgtgtc caatgccctg gagaccatga tgcagccat cgtccacagc gactacctga ccttcgagga ccagttatc cagcacatgg acaacatctt cgaactccatg atctgcatct ccttggtggc ctccatctgc aactcctgg ccacgcctg cgacaggtac gtcacatct tttacgcgct ccgtaccac agcatcatga cgtgaggaa ggcctcacc ttgatcgtgg ccactgggt ctgctgcgc gtctgtggcg tgggttctcat cgtctactcg gagagcaaaa tggctattgt gtgcctcatc accatgttct tgcacatgat cgtcctcatg ggcaccctct acgtgcacat gttctctttt gcgcggctgc acgtcaagcg catagcagca ctgccaactg ccgaagggtt ggcaccacag caacatcat gcatgaagg ggcagtcacc atcaccattc tctgggctgt gttcatcttc tgcctggccc ccttcttctt ccactgtgtc ctcatcatca cctgccccac caaccctac tgcactgtct acactgccc cttcaaaccc tacctgtctc tcatcatgtg caactcctgc atcgaccac tcatctacgc ttccgggagc ctggaattgc gaaacacctt tagggagatt ctctgtggct gaaacggcat gaacttggga tag</p>	Homo sapiens
157	3058	Melanocortin NM_005912 4 Receptor (MC4R)	<p>PFPSNQSSA FCEQVFIKPE IFLSLGIVSL LENILVILAV VRNGNLHSPM YFFLCSLAVA DMLSVSNAL ETIMIAIVHS DYLTFEDQFI QHMDNIFDSM ICISLVASIC NLLAIAVDYR VTIFYALRYH SIMTVRKALT LIVAIWCCG VCGVVFIVYS ESKMVIVCLLI TMFFAMLLLM GTLVHMFELF ARLHVRIIAA LPPADGVAPQ QHSCMKGAVT ITILGVFIF CWAPFFLHLV LIITCTPNPY CICYTAHNT YLVLIMNSV IDPLIYAFRS LEIINTFREI LCGCNGMNLG atgttgaact ccaccacccg tgggatgcac acttctctgc acctctggaa ccgcagcagt A tacagactgc acagcaatgc cagtgcgtcc ctgggaaaag gctactctga tggaggggtgc tacgagcaac tttttgtctc tctgaggtg tttgtgactc tgggtgtcat cagcttgttg gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acccatgtac tttttcatct gcagcttggc tgggtgtgat atgctgtga gcgtttcaa tggatcagaa accattatca tcacctatt aaacagtlaca gatacggatg cacagagttt cacagtgaat attgataatg tcattgactc ggtgatctgt agctccttgc ttgcacatct ttgcagcctg ctttcaattg cagtgagcag gtactttact atctcttatg ctctccagta ccataacatt atgacagtta agcgggttgg gatcatcata agttgtatctt gggcagcttg caggttttca ggcattttgt tcatcattta ctcatagat agtgcgttca tcatctgcct catcaccatg ttcttcacca tgctggctct catggttct ctctatgtcc acatgttctt gatggccagg cttcacatta agaggattgc tgcctcccc ggcactgggtg ccataccgcca aggtgccaat atgaaggag cgattacatt gaccatctg attggcgtct ttgtgtctg ctgggcccga ttcttctcc acttaatt ctacatct tgcctcaga atccatattg tgtgtgcttc atgtctcact ttaactgtga totcactatg atcatgtga attcaatcat cgatcctctg atttatgcac tccggagtca agaactgagg aaacacttca aagagatcat ctgttgcctat ccccctgggag gcctttgtga ctgtctagc agatattaa</p>	Homo sapiens
158	3058	Melanocortin NP_005903.1 4 Receptor	<p>MYNSTHRGMH TSLHLMNRSS YRLHNSAES LGKGYSDGGC YEQLFVSPEV FVTLGVISLL P ENILVIVAIA KNKNLHSPMY FFICSLAVAD MLVSVNGSE TIIITLINST DTDAQSFTVN</p>	Homo sapiens

159	3059	Melanocortin NM_005913 5 Receptor (MC5R)	(MC4R)	IDNVDSVIC SLLASICSL LSIANDRYFT IFYALQYHNI MTKVRVGIII SCIIWAACVTS GILFIYSDS SAVIICLITM FFTMLALMAS LYVHMFELMAR LHKRIAVLP GTGAIRQGAN MKGAIITIL IGVFVVCWAP FFLHLIFYIS CPQNPYCVCF MSHFNLYLIL IMCNSIIDPL IYALRSQELR KTFKEIICCY PLGLCLDLS RY atgaattcct catttcacct gcatctcttg gatctcaacc tgaatgccac agaggccaac A ctttcaggac ccaatgtcaa aacaagtct tcacatgtg aagacatggg cattgtctg gaggtgttc tcaactggg tgatcagc ctcttgaga acatctggg cataggggcc atagtgaaga aaaaaacct gactccccc atgtacttct tcgtgtgcag cctggcagtg gcggacatgc tggtagcat gtccagtgc tgggagacca tcacatcta cctactcaac aacaagcacc tagtgatagc agacgcttt gtgcgccca ttgacaaagt gttgactcc atgatctgca ttccgtggt ggcaccatg tgcagcttac tggccattgc agtgatagg tacgtacca tctctacgc cctgcgtac caccacatca tgaaggcgag gcgtcaggg gccateatcg ccggcatctg ggtttctgc acgggtgag gcatgtctt catctgtac tcagaatcca cctacgtcat cctgtgcctc atctccatgt tcttcgctat gctgttcctc ctggtgtctc tgtacataca catgttctc ctggcgcgga ctacgtcaa gcggtcgcg gctctgccg gggccagctc tgcggcgag aggaccagca tgcaggcgcc ggtcacctc accatgctgc tggcgctgtt taccgtgtgc tgggccccg tcttcttca tctcacttta atgctttct gccctcagaa cctctactgc tctcgttca tgcctcactt caatatgtac ctcactactca tcatgtgtaa ttcgtgatg gacctctca tatatgctt ccgagccaa gagatgcgga agaccttaa ggagattatt tgctgcgtg gttcaggat cgcctgcagc tttcccaaga gggattaa	Homo sapiens		
160	3059	Melanocortin NP_005904.1 5 Receptor (MC5R)		LVKKNLHSP MYFFVCSLAV ADMLVSMSSA WETITYLIN NKHLVIADAF VRHIDNVFDS MICISVVASM CSLLAIAVDR YVTIFYALRY HHIMTARRSG AIIAGIWAFC TGGGIVFILI SESTYVILCL ISMFFAMFLF LVSLYIHMFL LARTHVKRIA ALPGASSARQ RTSMQAVTV TMLLGVFTVC WAPFFLHLTL MLSCPQLNYC SRFMSHFNMY LILIMNSVM DPLIYAFRSQ EMRKTKEII CCRGFRIACS FPRRD ggagagggtg tgagggcaga tctgggggtg cccagatgga aggaggcagg catgggggac A accacaagcc ccttggcagc accatgaact aagcaggaca cctggagggg aagaactgtg gggacctgga ggcctccaac gactccttc tgcctctgg acaggactat ggctgtgcag ggatccaga gaagacttct gggctccctc aactccacc ccacagccat cccccagctg gggtggctg ccaaccagac aggagcccg tgcctggagg tgcctatctc tgacgggctc ttcctcagc tggggctggt gagcttggt gagaaagcgc tgggtgtgac caccatcgcc aagaaccgga acctgactc acctatgtac tgcctcatct gctgctggc cttgtcggac ctgctgtga gcggagagcaa cgtgctggag acggcctca tctcctgct ggaggccgtt gcaactgttg cccgggctgc ggtgctgcag cagtgaga atgtcattga cgtgatcacc tgagctcca tgcgtccag cctctgttc ctggcgcca tgcgctgga ccgtacatc tccatctct acgactgcg ctaccacag atcgtgacc tgcgggggc gcgcaagcc gttgcggcca tctgggtggc cagtgctgc ttcagacgc tcttctcgc ctactacgac cacgtggcg tctgtgtg cctgtgtg tcttctcgc ctatgtgtt gctcagggc gtgctgtacg tccacatgct ggcccgggc tgcagcagc cccagggcat gcgcccgtc	Homo sapiens		
161	3061	Melanocortin NM_002386 1 Receptor (MC1R)					Homo sapiens

162	3061	Melanocortin 1 Receptor (MC1R)	NP_002377.2	MAVQSQRRRL LGSLNSTPTA IPQLGLAANQ TGARCLEVSI SDGLFLSLGL VSLVENALVV P ATIAKNRNLIH SPMYCFICCL ALSDLIVSGS NVLETAIVILL LEAGALVARA AVLQQLDNVI DVTICSSMLS SLCFIGAIAV DRYISIFYAL RYHSIVTLPR ARQAVAAIIV ASVVFSTLFI AAYDRHAVLL CLVFFFLAML VLMVLYVHM LARACQHAQG IARLHKRQRP VHQGFGLKGA VTLTILIGIF FLCWGPFFLIH LTLIVLCPEH PTCGCIKNE NLFALIION AIIDPLIYAF HSQELRRTLK EVLTCSW	Homo sapiens
163	3079	Melatonin Receptor type 1a	NM_005958	ccggcgagc cttacaagt ggtcggggcg gcgacgagc cggcgatgg cctcgggc A gggacgcgaa cagggaccat gcaggccaac ggcagcgcg tgcccaacgc cteccagccc gtgctcgcg gggacggcg cggccctcg tggctggcg cgccttagc ctgcgtctc atcttcacca tcgtggtgga cactcggc aactcctgg tcactctgc ggtgatcgg aacaagaagc tcaggaaacgc aggaacatc tttgtggtg gcttagcgg ggcagacctg gtggtggcca ttatccgta cccgttggtg ctgatgtcga tatttaacaa cgggtggaa ctgggctatc tgcactgcca agtcagtgg ttcctgagc gctgagcgt catcggctc atattcaaca tcacgggat cgcactcaac cgtactgct acatcgcca cagtctcaag tacgacaaac tgtacagcag caagaactcc ctctgctacg tgcctcctcat atggctcctg acgtggcg cgtcctgccc caactcctg gcagggactc tccagtaaga cccgagatc tactcgtgca ccttcgcccc gtcgctcagc tccgctaca ccatcgccg ggtggttctc cacttctcg tccccatgat catagtcatc ttctgttacc tgagaatatg gatcctggtt ctccaggta gacagagggt gaaactgac cgaaaccca aactgaacc acaggacttc aggaaatttg tcacatggt tgtggttttt gtctctttt ccatttgctg ggtcctctg aacttcattg gccggccgt gccctctgac cccgcagca tgggcctag gatccagag tggctgttg tggcagta ctacatggcg tattcaaca gctgctcaa tgccattata tacgggctac tgaacaaaa ttccagggaag gaatacagga gaattatagt ctgctctgt acagccaggg tgttctttgt ggacagctct aacgacgttg ccgatagggt taaatgaaa ccgtctccac tgatgacca caataatga gtaaggttg actcgttta aaaagcacc acgttcggg tgatggac acgtgcgca aggcctcgt cttgacagat gctgggaaa gcagagtgtt ggaggaaact tccaaacttt acctggctgc tgccatagtt tctgagctaa cgtgctgta gattataaa cccctccaat ctactagta agagaagta agaattgatg gagagtaca tgttaactga ggaatgcggt tcagggcttg ggtgagagta agctgctgaa tgcatcagg ggaaggagt tgcaacttt tatttaaat ggtgccaca aaaggggtaa ttgcattctt cttactttt tgaagacttc tagcagaaaa atgaagaga atttatta taaatgagca aatggaaca tttttttct gtaaatggaa caacaatga agtgggggtg agtgcctctt attacagag gaaaggctga acataatca gttaatggct catcaacaat	Homo sapiens

164	3079	Melatonin Receptor type 1a	NP_005949.1	<p>caaaaccaca accaaacacca caaacctttc agctggcaga gtttagcattg ggtagctata ctcatggtca taaatgtttg cgcctctata ttacaagtgt tgcatagaac cagataaaga actaaatcat agcccgga cagtcgtca cagctgaat ctacagcact tgggaggtg aggtgggacg atcaactgag ttacagagtt ttgagaccat ctggggcaac atgatgaat cccatctcta aaaaaatata aaaaattatc tgggcatgtt gcacagcct gtaatccag ctactcagga gactgagtta ggagaatccc ttgagcccca gaggcagagg ttgtgtgag ccgagatcgc gccagtacat tccaacttag gctacagaat gagactctgc ccaaaaaaa aaaaaaaa</p>	Homo sapiens
165	3080	Melatonin Receptor type 1b	NM_005959	<p>MQNGSALPN ASQVLRGDG ARPSWLASAL ACVLITFIV DIGNLLVL SVRNKKLRN P AGNIFVSLA VADLVVAIYP YPLVMSIFN NGWNLGYLHC QVSGFLMGLS VIGSIFNITG IAINRYCYIC HSLKYDKLYS SKNSLCYVLL IWLITLAAVL PNLRAGTIQY DPRIYSCIFA QSVSSAYTIA VVVEHFLVPM IIVIFCYLRI WILVLQVRQR VKPDRKPKLK PQDFRNFVTM FVVFLEAIC WAPLNFIGLA VASDPASMPV RPEWLFVAS YMYAYENSCL NAIYGLINQ NERKEYRRII VSLCTARVFF VDSSNDVADR VKWKPSPLMT NNNVVRVDSV</p>	Homo sapiens

166	3080	Melatonin Receptor type 1b	NP_005950.1	<p>ttggttaacta caaggccctc aggtggggca ggtgcagagg gc</p> <p>MSENGSEFANC CEAGGWAVERP GWSGAGSARP SRTPRPPWA PALSAVLIVT TAVDVVGNLL P</p> <p>VILSVLRNRK LRNAGNLFLV SLALADLVA FYFYPPLILVA IFYDQWALGE EHKKASAFVM</p> <p>GLSVIGSVFN ITAIAINRYC YICHSMAYHR IYRRWHTPLH ICLIWLLTVV ALLPNFFVGS</p> <p>LEYDPIRYSC TFIQTASTQY TAAVVIHFL LPIAVSFCY LRIWVLVQA RRAKAPESRL</p> <p>CLKPSDLRSF LTMFVWFVIF AICWAPLNCI GLAVAINPQE MAPQIPEGIF VTSYLLAYFN</p> <p>SCINAIVYGL LNQNFRREYK RILLALWNP RHCIQDASKGS HAEGLSQSPAP PIIGVQHQAD</p> <p>AL</p>	Homo sapiens
167	3081	Melatonin- Related Receptor	NM_004224	<p>tggttgctgt ctggacctgg ctgctgatcc tgagctgctt gggagatatt aacgatcccc A</p> <p>aggagcaaca tggggccccc cctagcgggt cccacccctt atggctgtat tggctgtaag</p> <p>ctacccagc cagataccc accgctcta atcatctta tgtctgcg gatggttatc</p> <p>accatcgttg tagacctaat cggcaactcc atggtcattt tggctgtgac gaagacaag</p> <p>aagctccgga attctggcaa catcttcgtg gtcagtctct ctgtggccga tatgctggtg</p> <p>gccatctacc catacccttt gatctgcat gccatgtcca ttgggggctg gcatctgagc</p> <p>cagttacagt gccagatggt cgggttcac acagggctga gtgtggctgg ctccatcttc</p> <p>aacatcgtgg caatcgctat caaccgttac tgctacatct gccacagcct ccagtacgaa</p> <p>cggatcttca gtgtgcgcaa tacctgcac tacctggta tcaactggat catgacgcgc</p> <p>ctggtgtgcc tggccaacat gtacattggc accatcgagt acgatccctg caactacacc</p> <p>tgcatcttca actatctgaa caacctgtc tteactgtta ccatcgtctg catccacttc</p> <p>gtctccctc tcctcatcgt gggtttctgc tacgtgagga tctggacca agtgcgtggc</p> <p>gccctgacc ctgcagggca gaactctgac aaccaacttg ctgaggttgc caattttcta</p> <p>accatgtttg tgatcttct cctcttgcga gtgtgctggt gccatatcaa cgtgctcact</p> <p>gtcttggtgg ctgtcagtc gaaggagatg gcaggcaaga tcccaactg gctttatct</p> <p>gcagcctact tcatagccta ctcaacagc tgcctcaacg ctgtgatcta cgggctctc</p> <p>aatgagaatt tccgaagaga atactggacc atcttccatg ctatgcggca cctatcata</p> <p>ttcttccctg gcctcatcag tgatattcgt gagatgcagg aggcccgta cctggccgc</p> <p>gccgtgccc atgtctcgga ccaagctcgt gaacaagacc gtgccatgc ctgtcctgct</p> <p>gtggaggaaa ccccgatgaa tgtccggaat gttccattac ctggtgatgc tgcagctggc</p> <p>cacccgacc gtgcctctgg ccacctaag cccattcca gatctctc tgctatcgc</p> <p>aaatctgct ctaccacca caagtctgtc tttagccact ccaaggctgc ctctggtaac</p> <p>ctcaagcctg tctctggcca ctccaagcct gcctctggtc acccaagtc tgcacatgc</p> <p>taccetaagc ctgcctctgt ccattcaag ggtgactctg tccatttcaa ggtgactct</p> <p>gtccatttca agcctgactc tgttcatctt agcctgctt ccagcaaccc caagccatc</p> <p>actggccacc atgtctctgc tggcagccac tcaagtctg ccttcagtgc tgcaccagc</p> <p>caccetaaac ccatcaagcc cctaagccc gctgctgctg acaacctga gctctctgcc</p> <p>aagcctgcca ctaccagcca cctaagccc gctgctgctg acaacctga gctctctgcc</p> <p>tccattgccc ccgagatccc tgcattgccc caccctgtgt ctgacgacag tgacctccct</p> <p>gagtgcgcct ctagccctgc cgtggggccc accaagcctg ctgacagcca gctggagctt</p> <p>gacaccatcg ctgaccttcc tgacctact gtatcacta ccagtaccaa tgattaccat</p> <p>gatgtcgtgg ttgtgatgtg tgaagatgat cctgatgaaa tggctgtgtg aaaaatgctc</p> <p>tcgtagggtgg ccaggcagt</p>	Homo sapiens

168	3081	Melatonin- Related Receptor	NP_004215.1	MGPTLAVPTP YGCTGCKLPQ PEYPPALLIF MFCAMVITIV VDLIGNSMVI LAVTKNKKLR P NSGNIFWVSL SVADMLVAIY PYPLMLHAMS IGGWDLSQLQ CQMVGFITGL SVVGSIFNIV AIAINRYCYI CHSLOYERIF SVNTCIYLV ITWMTVLAV LPNWYIGTIE YDPTYTCIF NYLNPVFTV TIVCIHFVLP LLIVGFVYR IWTKVLARD PAGQNPQNQL AEVRNFTMF VIFLFAVCW CPINVLTVL AVSPKEMAGK IPNWLYLAAY FIAYFNSCLN AVIYGLLEN FRREYWTIFH AMRHPPIFFP GLISDIREMQ EARTLARARA HARDOAREQD RAHACPAVEE TPMNVNVL PGDAAGHPD RASGHPKPHS RSSSAYRKA STHKSVFSH SKAASGHLKP VSGHSGPAS HPKSATYPK PASVHFKGDS VHFKGDSVHF KPDVHFKPA SNNPKPITGH HVSAGSHSKS AFSAAATSHPK PIKPAATSHAE PTTADYPKPA TTSHPKPAAA DNPELSASHC PEIPAIAHPV SDDSDLPESA SSPAAGPTKP AASQLESDFI ADLPDPTVVT TSTNDYHDWV VVDVDDPDE MAV	Homo sapiens
169	3093	Metabotropic Glutamate Receptor 1	NM_000838	gaattccctt acaaacgcct ccagcttgta gaggcggtcg tggaggagcc agaggaggag A acgaaggga agggggcgt ggtggaggag gcaaggcct tggacgacca ttgttggcga ggggcaccac tccgggagag gggcgctgg gctcttggg ggtgcgcgc gggagcctgc agcggacca gctgggaac gggctggca gctgtggag ctgctctca ccaccatggt cgggtcctt ttgtttttt tccagcgat cttttggag gtgtccctt tccccagaag ccccgcag aaagtgttc tggcaggag gctgtctcag cgtcgtgtg ccagaatgga cggagatgc atcattggag cctctctc agtccatcac cagctctcgg ccgagaaagt gcccagagg aagtgtggg agatcaggga gcagtatgg atccagagg tggaggccat gttccacag ttggataaga tcaacgcgga cccgtctctc ctgcccaca tcccttggg cagtgaatc cgggactcct gctggcactc ttccgtggct ctggaacaga gcattgagtt cattagggac tctctgatt ccatcgaga tgagaaggat gggatcaacc ggtgtctgcc tgacggccag tccctcccc caggcaggac taagaagccc attgcgggag tgatcggctc cggctccag tctgtagcca ttcaagtga gaacctgtc cagctctctg acatccccca gctgcttat tcagccaca gcacgacct ggtgacaaa actttgtaca aatactctt gagggtgtc cttctgaca cttgcaggc aaggcccat ctgacatag tcaaacgtta caattggacc tatgtctcty cagtccacac ggaagggaat tatggggaga gcggaatgga cgcttcaaa gactggcty cccaggaaag cctctgtat gccattctg acaaaatcta cagcaacgt ggggagaaga gctttgaccg actcttgccg aaactccgag agaggcttc caaggctaga gtgtgtgtc gctctgtga aggcattgca gtgcgaggac tctgagcgc catgcccgc cttggcgtc tggcgagtt ctactcatt ggaagtgat gatgggcaga cagagatga gtcattgaag gttatgaggt ggaagccaac gggggaatca cgataaagct gcagtctca gaggtcaggt cattgatga ttattctcg aaactgaggc tggacactaa cacgaggaat cctgtgttc ctgagttcty gcaacatcg ttccagtgc ccttccagg acacctcty gaaaatccca actttaaacg aactgcaaa ggcattgaa gcttagaaga aaactatgtc caggacagta agatggggtt tgtcatcaat gccatctat ccattggaca tgggtgcag aacatgcacc atgcctcty cctggccc gtggcctct gcgatgccat gaagccatc gacggcaga agctgtgga ctctctcat aagctctcat tcattggagt atctggagag gagggtggt ttgatgaga aggagacgt cctggaagt atgatcat gaatctgag tacactgaag ctaatcgcta tgactatgt cagcttgaa cctggcatga aggagtgtc aacattgatg attacaaaat ccagatgaac aagagtggag tggcgcggtc	Homo sapiens

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taaatatttt ctatttat

Homo

3093 Metabotropic NP_000829.1 MVGLLFFFP AIFLEVSILP RSPGRKVLLA GASSQRSVAR MDGVDIIGAL FSVHHQPPAE P

170

172	3094	Metabotropic Glutamate Receptor 2	NP_000830.1	<p>aggtccgctt tgacgcgttt ggtgatggtg ttggcgcgta caacatcttc acctatctgc gtgcaggcag tgggcgctat cgctaccaga agtggtgcta ctgggcagaa ggcttgactc tggacaccag cctcatccca tgggcctcac cgtcagccg cccctggcc gctctcgtc gcagtggcc ctgctccag aatgaggtga agagtgtga gccggcgaa gctcgtgct gtgctgtgat tccgtgccag ccctatgagt accgattgga cgaattcact tgcgtgatt gtggcctggg ctactggccc aatgcagcc tgaactggctg cttegaactg cccagggagt acatccgctg gggcgatgcc tgggtgtggt gacctgtcac cctgcctgc ctggtgccc tggccacct gtttgtgtg ggtgtctttg tggcgacaaa tggccaccaa gtggtcaagg cctcaggctg ggagctctgc tacatctgc tgggtgtgtt ctctctctgc tactgcatga ccttcattt cattgccaa ccatccacgg cagtgtgtac ctacaggcgt ctgtgtttg gcaactgctt ctctgtctg tacteagccc tggcagccc gacctacaa gaccaacgc attgcacga tcttcggttg ggcgcgggag ggtgccagc ggcacgctt catcagctct gctcagcag tggccatctg cctggcaatt atctgggccc agtgcctcat cgtgtcgcg tgggtgttg tggaggcacc gggcacaggc aaggagacag ccccgaaag cggggaggtg gtgacactgc gctgcaacca ccgcatgca agtatgttg gctcgtggc ctacatgtg ctctcctgc cgctctgcac gctttatgcc ttaatactc gcaagtggc cgaaaaactc aacgagcca agttcattg cttcaccatg tacaccact gcatcattg cgtggcattg ttgccatct tctatgtcac ctccagtac tacgggtac agaccacac catgtcgtg tcaatcagcc tcagcgctc cgtgtgctt ggctgctct ttgcccacaa gctgcacatc atctcttcc agccgcagaa gaactgtgtt agccacggg caccacacag ccgctttggc agtgcgtg ccagggccag ctccagcctt ggcgaagggt ctgctccca gttgtccc actgttgca atggcgtga ggtgtggag tgcacaactg catgctttg a</p>	Homo sapiens
173	3095	Metabotropic Glutamate Receptor 3	NM_000840	<p>atggcgtga ggtgtggag tgcacaactg catgctttg a MCSLLALLAL LPLNGAVAG PAKKVLTEG DIVLGLFPV HQKGPAEDC GPVNEHRGIQ P RLEAMLFALD RINRDPHLLP GVRLGAILD SCSKDTHALE QALDFVRASL SRGADSRHI CPDGSYATHG DAPTAITGVI GGSYSDVSIQ VANLLRLFQI PQISYASTSA KLSDKSRYDI FARTVPDFF QAKAMAEILR FENWTYVSTE ASEG DYGETG IEAFELEARA RNICVATSEK VGRAMSRAAF EGVWRALIQK PSARVAVLFT RSEDARELLA ASQRLNASFT WVASDGMGAL ESVWAGSEGA AEGAITIELA SYPISDEFASY FQSLDPWNNS RNPWFREFWE QRFRCSFRQR DCAHSLRAV PFEQESKIME VNAVYAMAH ALNHMRALC PNTTRLCDAM RPVNGRRLYK DFVLNVKFDA PFRPADTHNE VRFDREFDGI GRYNIFTYLR AGSGRYRYQK VGYWAFGLTL DTSLIPWASP SAGPLAASRC SEPCLONEVK SVQPEVCCW LCIPCQPYEY RLDEFTCADC GLGYWPNASL TGCFLPQY IRWGDWAVG PVTIACIGAL ATLEVLGVFV RHNATPVVKA SGRELICYILL GGVFLCYCMT FIFIAKPSTA VCTLRRLGLG TAFSVCYSAL LTKTNRIARI FGGAREGAQR PRFISPASQV AICLALISGQ LLIVAVLWV EAPGTGKETA PERREVTLR CNHRDASMLG SLAYNVLLIA LCTLYAENTR KCPENFNEAK FIGFTWYTC IWLALLPIF YVTSSDYRVQ TTTMCVSVSL SGSWLGLCF APKLHILFQ PQKNVVSHRA PTSRFGSAAA RASSSLGQGS GSQFVPTVCN GREVDSTTS SL cttttgttc gtagtaggag gaccacacat gagccagagc ccgggtgtcag gctcaccgcc A gccgctgcca ccgcggtcag ctccagctcc tgccaggagt tgcgtgtgcg aggaatttg tgacaggctc tgttagtgtg tctctcctt atttgaagga caggccaaag atccagttg gaaatgagag aggactagca tgacacattg gctccaccat tgatatctcc cagaggtaca</p>	Homo sapiens

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174	3095	Metabotropic NP_000831.1 Glutamate Receptor 3	<p>tggttggttg caccacaggt tcaatcatc ctgtttcaac ccagaaagaa tggtgtcaca cacagactgc acctcaacag gttcagtgct agtggaactg ggaccacata ctctcagtc ctgcaagca cgtatgtgcc acggtgtgc aatggcgagg aagctctcga ctccacaccc tcactctgt gattgtgaat tgcagttcag ttctgttgtt tttagactgt tagacaaaag tgctcacgtg cagctccaga atagtgaac agagcaaaag acaacccta gtacctttt ttagaacag tacgataaat tatttttag gactgtatat agtgatgtgc tagaacttcc tagctgagt ctagtcccc tattattaac aattcccca gaacatgga ataacattg tttacagagc tgagcattgg tgacagggtc tgacatgggc agtctactaa aaaaaaaa aaaaaaa aaaaaaaa aaaaaaaa aataaaaaa tccggtggca atattatgta acctttttc ctatgaagtt tttgtaggt cctgtttgta actaattag gatgagtttc tatgtgtat attaaagtta cattatgtg aacagattga tttctcagc acaataaaa aagcatctgt attaatgaa agatactgag aataaaacct tcaaggtttt</p>	Homo sapiens
175	3096	Metabotropic NM_000841 Glutamate Receptor 4	<p>MLTRLQVLT ALFSKGFLLS LGDHFRLRE IKTEGDIVLG GLFPINEKGT GTEECGRINE P DRGIQRLEAM LFAIDEINKD DYLLPGVKLG VHLDTCSDR TYALEQSLEF VRASLTKVDE AEYMCDDGSY AIQENIPLLI AGVIGGSYS VSIQVANLLR LFOIQIISYA STSAKLSKXS RYDYFARTVP PDFQAKAMA EILRFNWTY VSTVASEGDT GETGIEAFEQ EARLNICIA TAERKVGSRNI RKSYSVIRE LLOKPNARV VLFMRSDSR ELIAAASRAN ASFTWVASDG WGAQESIIG SEHVAYGAT LELASQPVQ FDRYFQSLN YNNHNPWR DFWEQKFOCS LQNRNHRV CDKHLAIDSS NYEQSKIME VNAVYAMAH ALHKMORTLC PNTTKLCDAM KILDGKKLYK DYLLKINFETA PENENKADS IVKEDTFDGG MGRYNVFNQ NVGGKYSYIK VGHWAETLSL DVNSIHWSRN SVPTSQSDP CAPNEMKNQT PGDVCCWICI PCEPYEYLAD EFTCMDCSG QWPTADLTC YDLPEDYIRW ADWAIGNPQ IACLGFMCTC MVTVFIKHN NTPLVKASGR ELCYILLFGV GLSYCMTFFF IAKSPVICA LRLGLGSSF AICYSALLTK TNCIARIFDG VKNGAQRPF ISPSQVFIC YDVLIVILCT VYAFTRKCP ENFNEAKFIG FTMVTTCTIHW RETVLKCNV KDSSMLISLT YDVLIVILCT VYAFTRKCP ENFNEAKFIG FTMVTTCTIHW LAFLRIFYVT SSDYRVQTTT MCISVSLSGF VVLGCLFAPK VHILFQPOK NVVTHRLHLN RFSVSGTGTT YSQSSASTYV PTVNCGREVL DSTTSSL</p>	Homo sapiens
175	3096	Metabotropic NM_000841 Glutamate Receptor 4	<p>ccagtgaca aggaggtggg agaggttagc ageatgggct acgcggttgg ctgccctcag A tccccctgct gctgaagctg ccctgccccat gccacccag gccgtggggc cagggggcctg ccaggggctag gagtgggctt gccgttcctg ggtctctagg gattcccgag atgcttgga agagaggctt gggtggtggtg tgggcccgcg tgcctcttgg cctgctctc agctttacg gccctggat gccttctcc ctgggaaagc ccaagggcca cctcacatg aattccatcc gcatagatgg ggacatcaca ctgggagggc tgttcccggt gcattggccgg ggtcagagg gcaagccctg tggagaactt agaaaggaaa aggcacatcca ccgctggag gccatgctgt tcgccctgga tcgcataac aacgacccgg acctgctgcc taacatcac ctggcgcccc gcattctgga cacctgctcc agggacaccc atgccctga gcagtcgctg acctttgtg aggcgtcat cgagaaggat ggacagagg tccgctgtgg cagtggcgcc caccatca tcaccaagcc tgaagctgtg tgggtgtca tgggtgcttc agggagctcg gtctccatca tgggtggccaa catccttcgc ctctcaaga taccacagc cagctacgcc tccacagcgc cagacctgag tgacaacagc cgtctcagc tcttctccc cgtggtgccc tggacacgt accaggccca ggccatgggtg gacatcgctc gtgccctcaa gtggaactat gtgtccacag</p>	Homo sapiens

tggcctcggg gggcagctat ggtgagagcg gtgtggaggc cttcatccag aagtcccggtg
aggacggggg cgtgtgcac gccagtcgg tgaagatacc acgggagccc aaggcaggcg
agttcgacaa gatcatccgc cgctctctgg agacttcgaa cgccagggca gtcacatct
ttgccaacga ggtgacacac aggcgtgtgc tggaggcagc acgaagggcc aaccagacag
gccatttctt ctggtatgggc tctgacagct ggggtctcaa gattgcacct gtgtgcacc
tggaggagggt ggtgagggtt gctgtcacga tctctcccaa gaggatgtcc gtacgaggt
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agttctggga ggacaacttc cactgcaagc tgagccgcca cgccctcaag aaggcagcc
acgtcaagaa gtgcaccaac cgtgagcgaa ttggcagga ttacgcttat gagcaggag
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accgtgacct gtgtcccgcc cgctgtgggc tctgcccgcg catggacctt gtagatggca
cccagctgct taagtacac cgaacgtca acttctcagg catcgacggg aacctgtga
ccttcaatga gaatgagat gcgctgggc gctatgacat ctaccaatgc cagctgcgca
acgattctgc cgagtacaag gtcattggct cctggactga ccacctgcac cttagaatag
agcggtatga ctggccgggg agcgggcagc agtgcctccg tctcatctgc agctgacct
gccaaaccggg tgagcggaag aagacagtga aggcacatgc ttgtgtctgg cactgcgagc
cttgacacag gtaccagtac caggtggacc gctacacctg taagacgtgt cctatgaca
tgcgccccc acgaaaccgc acgggtgccc ggcctatccc catcatcaag cttgagtggg
gtctgcccctg ggcgtgctg cccctcttcc tggcgtgggt gggeatcgct gccacgttgt
tcgtgtgtat cacctttgt cgctacaacg acagcccatc cgtcaaggcc tcgggcccgtg
aactgagcta cgtgtgctg gcagcatct tctgtgtgta tgcaccacc tctctcatga
tcgtgagcc cgacctggc acctgtcgc tgcgcgaat ctccctggga ctaggatga
gcatcagcta tgcagccctg ctacacaaga ccaacggcat ctaccgcatc ttcgagcag
gcaagcctc ggtcagtgcc ccacgttca tcagcccccgc ctacagctg gccatcacct
tcagctcat ctgctgcag ctgtgtggca tctgtgtgtg gtttgtgtg gacctccc
actcgttgtt ggacttcag gaccagcgga cactgaccc ccgcttcgac aggtgtgtg
tcaagtgtga catctcgac ctgtcgtca tctgctgtct gggctacagc atgtgtctca
tggtaacgtg caccgtgtat gccataaga cagcgccgtt gccgagacc ttcaatgagg
ccaagcccat tggcttcacc atgtacacca cttgcatcgt ctggctggcc ttcatcccca
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tctcgtgtag tctgagccc tcggtgtccc tgggaatgct ctacatgcc aaagtctaca
tcactctctt ccaccggag cagaacgtgc ccaagcgcaa gcgacgctc aaagccgtcg
ttacgggggc caccatgccc acaagttca cgcagaaggg caactccgg cccaacggag
aggccaagtc tgagctctgc gaaaccttg agcccacgc gctggccac aaacagactt
acgtcaatta caccaacct gcaatctagc gattccatgg agctgagcag caggaggagg
agccgtgacc ctgtggaagg tgcgtgggc cagggccaca cccaaggcc cagctgtctt
gcctgcccgt gggaccccac ggacgtggct tgggtgtgag gatagcagag ccccaagcca
tcaactgtgg cagcctggc aaaccgggtg agcaacagga ggacgagggg ccggggcggt
gccaggctac cacaagaacc tgcgtcttgg acctgtccc ctcccggccc caaacacag
gggtcagggt cgtgtgggccc ccagtgtatg atctctccct cctctcgtct ctgtgtgtg
tgttggcgac ccctctgtct gtctccagcc ctgtcttctt gtctcttat ctctttgttt

176	3096	Metabotropic NP_000832.1 Glutamate Receptor 4	<p>caccttttc ctctctggcg tccccggctg ctgtactct tggcctttt tgtgtctct</p> <p>ttctggctct tgcctccgcc tctctctctc atctctttt tctcagctc ctcttgctt</p> <p>cttgggtccc accagtgtca ctttctgccc gtttcttct ctgttctct ctgttctatt</p> <p>ctgtccagc cattgtctcc ctctccctgc cacttctcc cagttcacca aaccttacct</p> <p>gttgcaaaag gaaaaaagg aaaaaaatc aaaaacacaa aaagccaaaa cgaacaaaa</p> <p>tctcagtggt gttgccaagt gctgctctct cctggtgccc tctgtgtgtg tccctgtggc</p> <p>ccgcagcctg ccgcctgccc ccgccatct gcgtgtgtc ttgcccgctt gccccgccc</p> <p>tctgccgtct gtcttgccc cctgcccgc cctccctctt gccgaccaca cggagttcag</p> <p>tgcctgggtg ttgtgtgat gttattgac aatgtgtga gcgcattgat gttttttatc</p> <p>caagaacatt tctaataaaa ataaacacat ggttttgcaa aaaa</p>	Homo sapiens
177	3097	Metabotropic NM_000842 Glutamate Receptor 5	<p>1 MPKRGIGMW WARLPICLL SLYGPMWPS LGPKGHPHM NSIRIDGIT LGLFPVHGR P</p> <p>GSEKPCGEL KKEKGIHRL AMLFALDRIN NDPDLLPNIT LGARILDTC RDTHALEQSL</p> <p>TFVQALIEKD GTEVRCGSGG PPIITKPERV VGVIGASGSS VSIWVANILR LFKIPQISYA</p> <p>STAPDLSDNS RYDFSRWVP SDTYQAQAW DIVRALKNY VSTVASEGSY GESGVEAFIQ</p> <p>KSREDGGVCI AQSVPKIPREP KAGFDKIIR RLLETSNARA VIIFANEDDI RRVLEAARRA</p> <p>NOTGHFWMG SDSWGSKIAP VLHLEVAEG AVTILPKRMS VRGFDRYFSS RTLDNNRRNI</p> <p>WFAEFWEDNF HCKLSRHALK KGSHVKKCTN RERIGQDSAY EQEGKVQFVI DAVYAMGHAL</p> <p>HAMHRDLCPG RVGLCPRMDP VDGTLQLLKYI RNVNFSGIAG NPVTFNENG AGRYDIYQY</p> <p>QLRNDSAEYK VIGSWTDHLH IRIERHWPFG SQQLPRISC SLPCQPERK KTVKGMPCCW</p> <p>HCEPCTGYQY QVDRYTCKTC PYDMRPTENR TGCRIPIPIK LEWGSFWAVL PLFLAVWGIA</p> <p>ATLFVVITFV RYNDPTIVKA SEGRSLYVLL AGIFLCYAT FLIMIAEPDLG TCSLRIRIFLG</p> <p>LGMSISYAAL LTKTNRIYRI FEQKRSVSA PRFISPASQL AITFSLISLQ LIGICWFEVY</p> <p>DPSHSVVDFO DQRTLDPREA RGVLKCDISD LSLICLLGYS MLLMVTCTVY AIKTRGVPE</p> <p>FNEAKPIGFT MYTTCIVWLA FIPIFFGTSQ SADKLYIQTT TLTIVSVLSA SVSLGMLYMP</p> <p>KVYIILFHE QNVPKRKRSL KAVVTAATMS NKFTQKGNFR PNGEAKSELN ENLEAPALAT</p> <p>KQTYVTYTNH AI</p> <p>acaaaatggt cctttagaaa atacatctga attgctggct aattcttga ttgagactc A</p> <p>aacgtaggac atcgcttggt cgtagctatc agaaccctcc tgaattttcc ccaccatgct</p> <p>atctttattg gcttgaactc ctttctctaa atggctcttc tgttgatcct gtcagtctta</p> <p>cttttgaaag aagatgtccg tgggagtgca cagtcacagt agagaggggt ggtggctcac</p> <p>atgccgggtg acatcattat tggagctctc ttttctgttc atcaccagcc tactgtggac</p> <p>aaagttcatg agaggaagtg tggggcggtc cgtgaacagt atggcattca gagagtggag</p> <p>gccatgctgc ataccctgga aaggatcaat tcagacccca cactcttgcc caacatcac</p> <p>ctgggctgtg agataaggga cctctgcttg cattcgcttg tggccctaga gcagagcatt</p> <p>gagttcataa gagattccct cattcttcca gaagaggaag aaggtttggt acgtgtgtg</p> <p>gatggctcct cctcttctt ccgctccaag aagcccatag taggggtcat tgggcttggc</p> <p>tccagttctg tagccattca ggtccagaat ttgtccagc ttttcaacat acctcagatt</p> <p>gcttactcag caaccagcat ggatctgagt gacaagactc tgttcaataa tttcatgagg</p> <p>gttgtgctt cagatgtcca gcaggcaagg gccatggtg acatagtga gagttacaac</p> <p>tggacctatg tatcagccgt gcacacagaa ggcaactatg gagaagtgg gatggaagcc</p> <p>ttcaagata tgtcagcgaa ggaagggtt tgcacgccc actcttaca aatctacagt</p>	Homo sapiens

aatgcagggg agcagagcct tgataagctg ctgaagaagc tcacaagtca cttgcccacg gcccgggtgg tggcctgctt ctgtgagggc atgacgggtga gaggctctgct gatggcccatg aggcgcctgg gtctagcggg agaatttctg cttctgggca gtgatgctg ggcctgacagg tatgatgtga cagatggata tcagcgagaa gctgttggtg gcatacaaat caagctccaa tctcccgatg tcaagtgttt tgatgattat tatctgaagc tcgggccaga acaaaaccac cgaaccctt ggtttcaaga atttggcag catcgttttc agtgcgact ggaagggttt ccacaggaga acagcaata caacaagact tgcaatagtt ctctgactct gaaaacacat catgttcagg attccaaaat gggatttgtg atcaacgcca tctattcgat ggcctatggg ctccaaca tgacgatgc cctctgcca ggcctatgca gactctgtga tgcctgaag ccaattgatg gacggaaact tttggagtc ctgatgca ccaattttac tggggtttct ggagatacga tctattcga tgagaatga gactctccag gaaggtatga ataataaat ttcaaggaaa tgggaaaaga ttactttgat tataccaac ttggaagtgg gacaatgga gaattaaaaa tggatgatga tgaagtatgg tccaagaaaa gcaacatcat cagatctgtg tgcagtgaac catgtgagaa agccagatc aagtgatcc gaaagggaga agtcagcgtg tgttgacct gtacacctg taaggagaat gagtatgtct ttgatgagta cacatgcaag gcatgccac tggggtcttg gccactgat gatctcacg gttgtgactt gatccagta cagtatctc gatgggtga cctgaaacc attgcagctg tgggtgttgc ctgccttggc ctctggcca cctgtttgt tactgtagc ttcatcattt accgtgatac accagtagc aagtcctcaa gcaggaaact ctgtacatt atccttctg gcatctgctt ggcctactta tgtaccttct gctcattgc gaagccaaa cagatttact gctacctta gagaattggc attggtctct cccagccat gagctactca gcccttgtaa caaagacca cgttattgca aggatcctgg ctggcagcaa gaagaagatc tgaacaaa agccagatt catgagtgc tgtgccagc tagtgattgc ttcatctc atatgcatac agttgggcat catcgttggc ctctttataa tggagcctcc tgacataatg catgactacc caagcattcg agaagtctac ctgatctgta acaccacaa cctaggagtt gtactctcac ttgatataa tggattgttg attttgact gcaccttca tgcgttcaag accagaaatg ttccagctaa ctccaacgag gccaagtata tcgccttcac aatgtacacg acctgcatta tatggttagc tttgtgcca atctacttg gcagcaacta caaatcatc accatgtgtt tctcgttcag cctcagtgc acagtggcc taggtgcat gtttgtccg aagtgtaga tcatcctggc caaaccagag agaaacgtgc gcagcgcctt caccacatct accgtgtg gcatgcatgt aggggatggc aagtcactct ccgcagccag cagatccagc agcctagtca acctgtgga gagaggggc tctctgggg aaacttaag ttccaatgga aaatccgtca cgtgggccc gaatgagaa agcagccggg ggcagcact gtggcagcgc ctgtccatcc acatcaaaa gaaagaaaa cccaacaaa cggcgtcat caagccttc cccaagagca cggagagccg tggccttggc gctggcgtg gcgcaggcg gagcgtggg ggcgtgggg ccaaggcggtg tgcgggctgc gcaggcgcg gccagcgcg gcccgatcc ccagacgcg gcccaaggc gctgtatgat gtggcgag ctgagagca ctctccggc ccgcgcgcg cgcgtccac gtcgccatc agcacgtga gccacgcgc gggctcgcc agccacag acgacgatgt gccgtcgctg cactcgagc ctgtggcgcg cagcagctcc tcgcagggct ccctcatgga gcgatcagc agtgtgtca cccgttcac ggccaacatc agcgagctca actccatgat gctgtccacc gcggccccc gcccggcgt cggcgcccc ctctgctcgt cctactgat ccccaagag

178	3097	Metabotropic NP_000833.1 Glutamate Receptor 5	atccagttgc ccacgaccat gacgaccttt gccgaatcc agcctctgcc ggccatcgaa gtcacggcg gcgcgcagcc cgcgcgagg gcgcaggcgc ctggggacgc ggcccgagg agcccgccgc cgggtcccg ggctggccg gccaagccag acctggagga gctggtggct ctcaccgcgc cgtcccccct cagagactcg gtggaactcg ggagacacac cccaactcg ccagtgtccg agtcggccct ctgtatcccg tcgtctccca aatatgacac tcttatcata agagattaca ctcagagctc ctcgtggttg tgaatgtccc tggaagcac gccgcctgc gcgtgcggag cggagccccc cgtgttcaca cacacacat ggcaagcata gtcgctgggt tacggcccg ggggaatatg ccaaggacc ccttaatgga aacacagatc agtagtcta tctcatgaca accacaagaa accgacgaca aatcttttc gagattttct tctagtggct tagaacatg gcttttaaga aacacggtga tatcttttag ggtgacaaag cgtctctca aacagttcca taccactgc ttgctctag ggaagcagt cgttgaaac agcgtaacgg aggggtgaaga gcatagttaa taagcaactg taaaagtctt tattgttta ctttaattct tttccctgt aaaaagtctt attgtttac ttaattctt tcccagaaa agagtctttg attcacaaa catgaatgta cattttctaa caactcaaa atctgggacc aaacatcaa cttttttct tcttttct tctttttgt tttttttc ctgtaagac cttgaaaaga cctgaaaag cagtaacttg ggtccagtat ttacggaggc gttgtgaatg tgtccatgc ataacacact actggatagt gagtctgctg ctaatgtact acgtagggt tctaccagag atttctctc ccaattgggt tgtgaatac tcttcaaaa gcctgcatcg gggattccac ctacttatt cagattcacc tccattacc aagaaaacca gtggaagatt tcttgactat ttcaccatgt tgccaatc	Homo sapiens
179	3098	Metabotropic NP_000833.1 Glutamate Receptor 5	mvlllllsvl lkcdvrgsa osserrvvaah mfgdliigal fsvhqptvd kvherkgav p rboqgiqrve amhlterin sdptllpnit lgceirdscw hsaaleqsi efirdsliss eeeglvrcv dssssfrsk kpivgvtgpg sssvaioqvn llqlenipqi aysatsmdls dktlfkymr vpsdaqar amvdvkrin wtyvavhte gnyesgmea fkdmsakegi ciahsykiys nageqsfdkl lkkltslhp arvacfcec mtrgllmam rrlglagefl llgsdgwadr ydvtgdyore avggititklo spdvkwfddy ylkrlpetnh rnpwfqefwq hrfqcrlegf poenskyntk cnsslkth hvqdsxmgfv inaiysmay lhnqmslcp gyaglcdamk pidgrkles lmtntftgvs gdtildeng dspgryeimn fkemgkdyfd yinvgsdng elkmdddevm sksniirsv csepcekgqi kvirkgevsc cwtctpcken eyvfeytck acqlgswept dltgclidpv qylrwgdpdp iaaavfacldg llatlftvv fiiyrdtpw kssrelcyi ilagiclgyl ctfcliaxpk qiycylorig iglspamsys alvktnria rllagskklk ctkkprfmsa caqlviafil iciqlgiiva lfimeppdim hdypsiREVY licnttnlgv vtplgynll ilscftfayfk trnvpanfne akylafmtyt tciiwlaFVP iYFGSNYKII TMCFSVLSA TVALGCMFVP kviiilakpe rnvrSAFTTS TVVRMHVGDG KSSSAARSS SLVNLWRRG SSGETLSSNG KSVTWAQNEK SSRGQHLWQR LSIHINKEN PNQTAVIKPF PKSTESRGLG AGAGAGGSAG GVGATGGAGC AGAGPGGPES PDAGPKALYD VAAEAHEHPPA PARPRSPPI STLSHRAGSA SRTDDVPSL HSEPVARSS SQGSIMEQIS SVVTRFTANI SELNSMMLST AAPSPGVGAP LCSSYLIPKE IQLPTMTTF AEIQPLPAIE VTGGAQPAAG AQAAGDAARE SPAAGPEAAA AKPDLEELVA LTPSPFRDS VDSGSTTPNS PVSESALCIP SSPKYDTLII RDTQSSSSL	Homo sapiens

179	3098	Metabotropic Glutamate Receptor 6	NM_000843	cgagggccc	ggcaggccg	ctgagctaac	tcccagagc	caaagtggaa	ggcgcgcccc	A	Homo sapiens
				gagccttc	tcccaggac	cccgtgtcc	ctcccgcgc	cccagagccc	cgctctcctt		
				ccccgccct	cagagcgctc	cccgccttc	tgtctcccc	cagcccgcta	gacgagccga		
				tggcggccc	ccggagagcc	cgggagccgc	tgtctgtgc	gctgtgccc	ctggcgtggc		
				tggcagagg	gggectggcg	cgcgcggcg	gctctgtgc	cttggcgggc	ggcctgacgc		
				tggcgccct	gttcccgggt	cacgcgcgg	gcggggcg	ccggcgctgc	ggcgcgctga		
				agaaaggaca	gggctgtcac	cggctggagg	ccatgtcta	cgcctggac	cgcgtcaacg		
				ccgaccccc	gctcctgcc	ggcgtgcgc	tgggcgcgc	gctcctggac	acctgctgc		
				gggacacct	cgcgtggag	caggcgctga	gcttcgtga	ggcctgac	cgcggccgcg		
				gcgacggca	cgggtgggc	gtgcgtgcc	cgggagcgt	ccctccctg	cgcctgcgc		
				ccccgagcg	cgctgtggc	gtcgtggcg	cctcgccag	ctcgtctcc	atcatggctc		
				ccaacgtgt	gcgctgtt	gcgatacccc	agatcagcta	tgcctccaa	gccccgggc		
				tcagcgact	cacgcgtat	gactctctt	ccgggtgtg	gcccgcgac	tcctaccagg		
				cgcaggccat	ggtgacatc	gtgaggcac	tgggatggaa	ctatgtgtcc	acgtggcct		
				ccgagggcaa	ctatggcgaa	agtgggttg	aggctctct	tcagatctcc	cgaagggctg		
				ggggggctcg	tattgcccag	tctatcaaga	tcccaggg	accaagcca	ggagagttca		
				gcaaggtgat	caggagactc	atggagacgc	ccaacgccc	gggcacatc	atcttgcca		
				atgaggatga	catacggcg	gtcctggagg	cagctcgcca	ggccaacctg	acggccact		
				tcctgtgggt	cggctcagac	agctggggag	ccaagacctc	acccatcttg	agcctggagg		
				acgtggccgt	tggggccatc	accatctgc	ccaaaaggc	ctccatcgac	ggatttgacc		
				agtacttcat	gactcgatcc	ctggagaaca	accgcaggaa	catctggttc	gcgagttct		
				gggaagagaa	ttttaactgc	aaactgacca	gctcaggtac	ccagtcagat	gattccacc		
				gcaaatgcac	aggcgaggaa	cgcctcgcc	gggactccac	ctacgagcag	gaggccaagg		
				tgcagtgtgt	gattgatcg	gtgtatgcca	tggccacgc	ctccacagc	atgcaccagg		
				cgctctgcc	tgggcacaca	ggcctgtgcc	cggcgatgga	accaaccgat	ggcgggatgc		
				ttctgcagta	cattcgagct	gtccgttca	acggcagcgc	aggaacccct	gtgatgttca		
				acgagaacgg	ggatgcgcc	ggcggtacg	acatcttcca	gtaccaggcg	accaatggca		
				gtgccagcag	tggcggttac	caggcagtgg	gccagtgggc	agagaccctc	agactggatg		
				tggaggccct	gcagtgtct	ggcgacccc	acgaggtgcc	ctcgtctctg	tgcagcctgc		
				cctgcgggcc	gggggagcgg	aagaagatgg	tgaaggcgct	ccctgtctgt	tggcactgcg		
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				ccacggtggt	ggccaccttc	gtgcggtaca	acaacacgc	catcgcccg	gctcggggcc		
				gagagtcaag	ctacgtctc	ctcacggca	tcttctctat	ctacgccat	acctctctca		
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				cgacctcag	ctactctgcc	ctgctcacca	agaccaacgg	tatctaccgc	atctttgagc		
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				ccctcagcct	cacctccctg	caggtgtgtg	ggatgatagc	atggtgggg	gccccggccc		
				cacacagcgt	gattgactat	gaggacacgc	ggacagtgga	ccccgagcag	gccagagggg		
				tgctcaagtg	cgacatgtcg	gactgtctc	tcctgggctg	cctgggctac	agcctcctgc		

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acagttttac attcatgttg ttttctccac tgtgaactct gtgattcaga atcagaagca
gttcttagta gaggcatttc tacactgatt gcactgagga tatctccca gtgtgaagt
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180	3098	Metabotropic NP_000834.1 Glutamate Receptor 6	<p> tgggctctc tggcaggaac tctgatgcac cggagggcc atgtactcct gtggctttct cacattcggt ctacttgcag ggtatctcca cagcatgcac catctgggt acagggggac atcctctgtt actgaagatg ttgtcatatt tagtacattc acaaggttct tctctcca gaattttctg atgtacacaa ataactgact tccacaagag ggtttttcca cactcggtgt gtgcatacag ttctgcctg tgatcatttc tttatgttat tatttattt ttccagagata gggtcttgct caatttcta ggctggagtg cagtggcagc atcatagctc actgaagttt cgactgggc tcaagcaatc ctccgcttc agctcctga gtagctggtg cgaacgacca taccagcta atgttttatt ttigttagag acgaggtctc actatgttc ccaggctggt ctcgacttc tgagctcgag cgatcctcct gctccacct ccaaatgtt tcgattaca aacgtgagcc atgcaccta gctctttga tcatcttgt ggtttcagt gggggttgac agctccctaa agatttctt gttttttgc atgcattggt ttgaattctt tgaggtccaa tttatttga cccctgaata agttttgtg ggtttcttc tatgttga attatatagg cattctcca gtgtggttc tcttatgtcg agtgagagct gacctgcacc gaagtttgc ccatttgtg ccttgaatt atctgatga attatatgtt ccagtgaata tggagttctg ggttgaggc ttattccatg ttacacaaat taaattgca gtgtcctct ctggatgag agctctaaag cagagtaaga ttacgttctg atgtaagct taaccacctt ttataaggt ctcactgtg gtccactgtg ttgagacttc tacagaagag ctctgtata gtaaccattt tcttaggtg tctcacttgt gtgaacttc tgacacattt attatagctt gtccactt cttactctt ttgtcttcta gaaattccc tttaatatt tacattcatt gttactgta aagagtccag gtaactgact ttaattcaag ttacttctg tcaataaat ttaactttc cc </p>	Homo sapiens
181.	3099	Metabotropic NM_000844 Glutamate Receptor 7	<p> gaattcccaa caccaggta attttgtat ttttagtaga gattgggtt caccatgttg A gccagatgg tctcatctc ttgactctg gatctcctg gctgtgtctc caaagtgtc gggattacag gcatgagta ccatatccag ccaactgcag tcatcttat ggggcaaca cttggctgaa cccaggttt ctaagatac aaacctagg gcaacaccaa gcatctaat ggaataggca cctggctgac tccaggcatt ctaataatag agacacctg gcgaactcag </p>	Homo sapiens

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cggaggagct cgccctgaag ggccggacc tcggcgagc caccaccgtt cctccagcg
cgccgcgcg caccgagca gccgagcag catggtccag ctgaggaagc tgctccgct
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cctcgggggg ctgttcccc tgaagccaa ggttccacg ggaagccct ggcgacat
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cattacagat ctccaaatca ttgtctctt ggatatagc atttcttca ttggtcacatg

182	3099	Metabotropic NP_000835.1 Glutamate Receptor 7	tactgtgtat gccatcaaga ctcggtgtgt accgagaat ttaacgaag ccaagcccat tggattcact atgtacacga catgtatagt atggtctgcc ttcattccaa tttttttg caccgtcaa tcagcgaaa agctctacat acaactacat acgttacaa tctccatgaa cctaaagtga tcagtggcg tgggatgct atacatgcc aagtgtaca tcacatgtt ccacctgaa ctcaatgtcc agaaacgga gcgaagcttc aaggcggtag tcacagcgc caccatgtca tcgaggtgt cacacaaac cagtacaga cccaacggtg agcaaaagc cgagctctgt gaaaacgtag acccaaacg cctgtccatt ccatggaac atggagagg aagaccctca taataacctg gttatctaac ctgtccatt ccatggaac atggagagg aagaccctca gttattttgt caccacact ggcataggac tcttgggtcc taccgcttc ccatcaccg aggagcttcc ccgcccggga gaccagtgtt agagatcca agcaccctaa acagtgtct tatgaaatat ccttacttta tctgggttta ataagtcact gacatcacga ctgccaaact ggctgcaatt gtggacctc cctaccaag ggaagtgtga aactcaagtc ccgcccggc tctttagaat ggaccactga gagcacagg accgttttgg ggtgacctg tcttattacg tatgtacttc tagttgcaa ggtttgaaa tttctgtac agttgtgag gacctttgca ctttgccatc tgatgtcga cctcggttca ctgttgttt tcgaatgctt tgtttcata gagccctatt ctctcagacg gtggaatatt tggaaaaatt ttaaacaaat taaatttta aagcaatctt ggcagactaa aacaagtaca tctgtacatg actgtataat tacgattata gtaccactgc acatcatgtt tttttttt aagacaaaa agatgtttaa agacaaaa ctgtgtgag aaagtatgcc ccactatct ttgtatatg atagttaca taaaagggaag gtattggctg aactgaatag aggtcttgat ctttgaatg catgccagta atgtatttta cagtacatgt ttattatgtt caatattgt atttggttc tctttgtta ttttaatta gggtataga atattttgca ataattttaa taattattaa gctgtttgaa ggaaagaata tggatttttc atgtctgag gttttgtca tgcaccttt gactgatcag tgtgataagg actttaggaa aaaaagcatg tatgttttt actgttttga ataagtactt tctttaatct tgctgttat gtgccaattt agtgaaaaa acaacctt gctgaaaaat tccctcttc cattctctt caattctgtg atattgtca agaagtatc aataaggaaat tc mvqlrkllrv ltlmkfpcv levlcalaa aargemyap hsrlegdvt lgglfpvhak p gfsqvpcgdi krenghrle amlyaldojn sdpnlipnvt lgarldtcs rdyaleqsl tfvqaliqkd tsdvrcnge pvvfvrpek vvgigasgss vsmvanilr lfqiqlisya stapelddr rydffsrwp pdsfqaamv divkalgwny vstlasegsy gekvesftq iskeagglci aqsvripqr kdrtdfdri ikolltpns ravtfande dikqilaak radqvghflw vgsdswgski nplqhedia egaittpkr atvegfdyf tsrtlenrr nvmfaeywee nfnckltsq skkedtrkc tqerigkds nyeqekvqf vidavyamah alhhmndlc adyrgvcpep eqagkkllk yirvnfngs agtpvmenkn gdapgydif qyqtnsnp gyrligqwt d elqlniedmq wkgvrei pa svctlpckpg qrkktqkgt ccwtcepcdg yoyqfemtc qhcpydqrn enrtgqdip iiklewhspw avipvflaml giatiffma tfirndtpi vrasgrelsy vlltgiflcy iitflmiakp dvavcsfrrv flglgmcisy aalltktnri yrifeqgks vtaprlispt sqaitssli svqllgvfiw fgvdpnnii dydehktmnp eqargvlkcd itdlqicls gysillmvtc tvyalktrgv penfnearpi gftmyttciv wlaifipffg taqsaeklyi qttltlismn lsasvalgml ympkvyiif hpeelnvqkrk rsfkavvtaa tmssrlshkp sdrpnceakt elcenvdpns	Homo sapiens
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183	3100	Metabotropic Glutamate Receptor 8	PAAKKXVSY NNLVI	Homo sapiens
			tgctgtgttg caagaataaa ctttgggtct tggattgcaa taccactgt ggagaaaatg A	
			gtatgcgagg gaaagcgatc agcctcttgc cctgttttct tcctcttgac cgccaagtcc	
			tactggatcc tcaaatgat gcaagaact cacagccagc agtatgccc ttcatacgg	
			gtggatggg acattatttt ggggggtctc ttccctgtcc acgcaaggg agagagagg	
			gtgccttgtg gggagctgaa gaaggaaaag gggattcaca gactggaggc catgtttat	
			gcaattgacc agattaacaa ggacctgat ctccttcca acatcactct ggggtccgc	
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			gcttctgagg ggaactatgg tgagagcggg gtggagcct tcaccagat ctcgaggag	
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			gaggagattg cagaaggggc tgtgacaatt ttgccaaaac gagcatcaat tgatggattt	
			gatcgatact ttagaagccg aactcttggc aataatcgaa gaaatgtgtg gtttcagaa	
			ttctgggagg agaatttttg ctgcaagtta ggatcacatg ggaagaggaa cagtcataa	
			aagaaatgca cagggtgga gcgaattgct cgggattcat cttatgaaca ggaaggaaa	
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			gatctctgcc ctggatacat tggcctttgt ccacgaatga gtaccattga tgggaaagag	
			ctacttgggt atattcgggc tgtaatttt aatggcagt ctggcactcc tgtcactttt	
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			agtacgtgc tctaacggg gattttctc tgttatcaa tcactttttt aatgattgca	
			gaaccagata caatcatatg ctcttccga cgggtcttcc taggacttgg catgtttc	
			agctatgcag ccttctgac caaaacaaac cgtatccacc gaattttga gcaggggaag	
			aaatctgtca cagcgcacaa gttcattagt ccagcatctc agctgtgtat cacctcagc	
			ctcatctccg tccagctcct tggagtgttt gtctggtttg ttgtggatcc ccccaacac	
			atcattgact atggagagca ggcggacacta gatccagaga aggccagggg agtgcctcaag	
			tgtgacattt ctgatctctc actcatttgt tcaattggat acagtatcct cttgatggtc	

184	3100	Metabotropic NP_000836.1 Glutamate Receptor 8	acttgactg tttatgcaa taaaacgaga ggtgtccag agactttcaa tgaagccaaa cctattggat ttaccatgta taccacctgc atcatttggg tagctttcat ccccatcttt tttggtacag cccagtcagc agaaagatg tacatccaga caacaacact tactgtctcc atgagtttaa gtgttcagt atctctggc atctctata tgcccaagg tttattata attttcatc cagaacagaa tgttcaaaa cgcaagagga gcttcaaggc tgtgttgaca gctgccacca tgcaagcaa actgatccaa aaggaatac acagaccaa tggcgaggtg aaaagtgaac tctgtgagag tcttgaacc aacacttctc ctaccaagac acatatatc agttacagca atcattcaat ctgaacacag gaaatggcac aatctgaaga gacttggtat atgatcttaa atgatgaaca tgagaccgca aaatttcact cctggagatc tccgtagact acaatcaatc aaatcaatag ttagtcttgg aaggaacaaa aattagccat gagccaaaag tatcaataaa cggggagtga agaaacccgt tttatacaat aaaccaatg agtctcaagc taaaagtattg cttattcatg agcagttaa acaatcaca aaggaatac taatgttagc tcgtgaaaaa aatgctgttg aaataataaa tgtctgagt tattcttgta ttttctgtg attgtgagaa ctcccgctcc tgtccacat tgtttaactt gtataagaca atgagtcgtg ttcttgaat ggctgaccag attgaagccc tgggttggc taaaataaa tgcaatgatt gatgcagca atttttata caataaattt atttctaata ataaaggaat gttttgcaaa aaaaaaaaa aaaaactcga g MVCEGKRSAS CPCFFLLTAK FYWILTMQR THSQEYAHSI RVDGDIILGG LFPVHAKGER P GVPCGEKKKE KGIHRLAEML YAIQINKDP DLLSNITLGV RILDTCSRDT YALEQSLTFV QALIENDASD VKCANGDPPI FTKPKDISGV IGAASSSVSI MVANTLRLFK IPQISYASTA PELSDNTRYD FFSRVVPPDS YQAQAMVDIV TALGWNVYST LASEGNYGES GVEAFTQISR EIGGVCIQAS QKIPREPRG EFEKIKRL ETPNARAVIM FANEDDIRRI LEAAKLNQS GHFLWIGSDS WSKTIAPVYQ QEELAEQAVT ILPKRASIDG FDRYFRSRTL ANNRNVWFEA EFWEENFGCK LSGHGRNSH IKKCTGLERI ARDSSYEQEG KVQFVIDAVY SMAYALHNMH KDLCPGYIGL CPRMSTIDGK ELLGYIRAVN FNGSAGTPVT FENEGDAPGR YDIFQYQITN KSTEYKVIGH WTNQLHLKVE DMQWAHREHT HPASVCSLPC KPGERKKTVK GVPCCWHCER CEGNYQVDE LSCELCPLDQ RPNMNRGTGQ LPIIKLEWH SPWAVVPFV AILGIATTF VIVTFVRIND TPIVRASGRE LSYVLLTGIF LCYSITFLMI AAPDTIICSF RRVFLGLGMC FSYAALLTKT NRIHRIFEQG KKSVTAPKFI SPASQIVITF SLISVQLLGV FWFVWDPPH IIIDYGEQRT LDPEKARGVL KCDISDLSLI CSLGYSILIM VTCTVYANKT RGVPTFNEA KPIGFTMYTT CIIWLAFIGI FFGTAQSAEK MYIQTTTLTV SMSLSASVSL GMLYMPKVYI IIFHPEQNVQ KKRSEKAVV TAATMQSKLI QKGNDRPNGE VKSELCESE TMTSTKTTY ISYSNHSI	Homo sapiens
185	3212	Opioid mu- type Receptor	9gaattccgg ctataggcag aggagaatgt cagatgctca gctcggtccc ctccgcctga A cgctcctctc tgtctcagcc aggactgggt tctgtaagaa acagcaggag ctgtggcagc ggcgaagga agcggtgag gcgcttgaa cccgaaaagt ctcggtgctc ctggtacct cgcacagcgg tgcgcgccg gccgtcagta ccatggacag cagcgtgccc cccagaaacg ccagcaattg cactgatgc ttggcgact caagtgtctc cccagcaccc agccccggtt cctgggtcaa cttgtccac ttagatggca acctgtccga cccatgcggt ccgaaccgca ccaacctggg cgggagagac agcctgtgcc ctccgaccgg cagtcctccc atgacacgg ccatcacgat catggccctc tactccatcg tgtgctggtg ggggctcttc gaaaacttcc	Homo sapiens

tggatcatgta tgtgattgtc agatacacca agatgaagac tggcaccacac atctacattt
 tcaacctgtc tctggcagat gccttagcca ccagtaacct gcccttceag agtgtgaatt
 acctaatggg aacatggcca ttggaacca tctttgcaa gatagtgtc tccatagatt
 actataacat gttcaaccg atattcacc tctgcacct gatgtgtgat cgatacatgtg
 cagttcgcca cctgtcaag gccttagatt tccgtactcc cgaataagcc aaattatca
 atgtotgcaa ctggtatcctc tcttcagcca ttggtcttcc tgaatgttc atggctacaa
 caaataacag gcaaggttcc atagattgta cactaacatt ctctcatcca acctgggtact
 gggaaaacct cgtgaagatc tgtgttttca tcttcgctt cattatgcca gtgctcatca
 ttaccgtgtg ctatggactg atgactcttg gcccaagag tgcgcgtgtg tgggtggctg
 ccaagaataa ggacaggaat ctctgaagga tcaccagag gtgctgtgtg tgggtggctg
 tgttcatcgt ctgctggact cccattcaca ttacgtcat cattaaagcc ttggttataa
 tcccagaacac tacgttccag actgtttctt ggcacttctg cattgtctca gttacacaa
 acagctgct caaccagtc ctttatgcat ttctggatga aaacttcaa cgatgcttca
 gagagtctg tatcccaacc tcttcaaca ttgagcaaca aaactccact cgaattcgtc
 agaactag agacacccc tccacggcca atacagtga tagaactaat catcagctag
 aaaactgga agcagaaact gctcgttgc ctaacagggt tctcatgcca tcccgacct
 caccagctt agaagccacc atgtatgtg aagcaggttg cttaagaat gtgtaggagg
 ctctaattct ctaggaaagt gctactttt agtcatcca acctcttcc tctctggcca
 ctctgctctg cacattagag ggacagccaa agtaagtgg agcatttga aggaaggaa
 tatacacac cgaggagtcc agtttgtga agacacccag tggacaccaa accatcgtg
 gtatgtaat tgaagtcac ataaagggtg accttctgt ctgtaagatt ttatttcaa
 gcaaatattt atgactcaa caaagaaga ccatctttt ttaagttcac cgtagtaaca
 cataaagtaa atgctacctc tgatcaaac accttgaat gaaggtccga gtcttttag
 tgttttga agggaatgaa tccattatc tatttagac tttaacttc aactaaaaat
 tagcatctgg ctaaggcatc atttcaacct ccatttcttg gtttgtatt gtttaaaaaa
 aataacatct ctttcatcta gctccataat tgcaaggga gagattagca tgaagggtaa
 tctgaacac agtcatgtgt canctgtaga aaggttgatt ctcatgcact ncaataactt
 ccaagagatc atcatggggg atttttcatt cttaggcttt cagtgggttg ttcctggaat
 tc

186	3212	Opioid mu- type Receptor	NP_000905.1	MDSSAAPTNA SNCTDALAYS SCSPAPSPGS WVNLSHLDGN LSDPCGNPT NLGRDSLCP P	Homo sapiens
				PTGSPSMITA ITIMALYSIV CVVGLFGNFI VMVIVRYTK MKTATNIYIF NLALADALAT STLPFQSWY LMGTWPFGTI LCKIVISIDY YNMFTSIFTL CTMSVDRYIA VCHPVKALDE RTPRNAKIIN VCNWILSSAI GLPNFMFMTT KYRQGSIDCT LTFSHPTWYV ENLVKICVFI FAFIMPVLII TVCYGLMILR LKSVNMLSGS KEKDRNLRI TRWLVVAV FIVCWTPHI YVLIKALVTI PETTFQTVSW HFCIALGYTN SCLNPVLYAF LDENFKRCFR EFCIPTSSNI EQONSTRIRQ NTRDHPSTAN TVDRNHNQLE NLEATAPLP	
187	3223	Muscarinic acetylcholin e Receptor M1	NM_000738	atgaacactt cagccccacc tgctgtcagc cccaacatca ccgctctggc accaggaaag A ggtccctggc aagtgccctt cattgggac accacgggcc tccgtctgct agccacagtg acaggcaacc tgctggtagt catctcttcc aaggtcaaca cggagctcaa gacagtcaat aactacttcc tgctgagcct ggctgtgtgt gacctcatca tcggtacctt ctcctgaac ctctatacca cgtacctctt catggggcac tgggtctctg gcacgtctggc ttgtgacctc	Homo sapiens

188	3223	Muscarinic acetylcholin e Receptor M1	NP_000729.1	<p> tggctggccc tggactatgt ggcagcaaat gctcccgta tgaatctgt gctcateagc tttagccgt acttctcgt gactcggccc ctgagctacc gtgccaagcg cacacccgc cggcagctc tgaatgacg cctggcctgg ctggttctct ttgtctctg ggcacacgc atctctctt ggcagtacct gtaggggag cggacatgc tagctggca gtgctacac cagtctctt cccagccat catcacctt ggcacagca tggctgctt ctacctcct gtacagtea tgtcacgt ctactggc atctaccgg agacagaga cogagcacgg gagctggcag ccttcaggg ctccagacg ccaggcaag ggggtggcag cagcagcagc tcagagagt ctacagcagg gctgagggc tcaccagaga ctctccagg ccgctgctgt cgctgctgc gggcccccag gctgctgag gctacagat ggaaggaaga agaggaagag gacgaaggt ccatggagtc cctcacatc tcagagggag agagcctgg ctccgaagt gtgatcaaga tgccaatggt ggaacccgag gcacagccc ccaccaagca gcccacagg agtccccc aa atacagtaa gagccgact aagaaaggc gtgatcgagc tggcaaggc cagaagccc gtgaaaggga gcagctggc agcggaaga cctctcgt ggtcaaggag aagaaggcgg ctcgacct ggtgccatc ctctggcct tcactctcac ctggacaccg tacaacatca tggctgctgt gtcaccttc tgcaaggact gtgtccga gacctgtgg gagctgggt actggtctg ctacgtcaac agcaccatca acccatgtg ctacgcactc tgcaacaaag ccttcggga caccttcgc ctgctgctg tttgccgtg ggacaagaga cgctggcga agatcccaa ggcctcggc tccgtgcac gactccctc ccgccaatgc tga </p>	Homo sapiens
189	3224	Muscarinic acetylcholin e Receptor M2	NM_000739	<p> atgaataact caacaaact cctacaact agcctggctc ttacaagtcc ttataagaca A tttgaagtgg tgttattgt cctggtggct gataccctca gtttggtgac cattatcggg aacatcctag tcatgtttc cattaaagtc aacgccacc tccagaccgt caacaattac ttttattca gcttggcctg tctgacctt atcataggtg tttctccat gaacttgta acccttaca ctgtgattgg ttaactggcct ttggacctg tgggtgtga ccttggcta gccctggact atgtggtcag caatgcctca gttatgaatc tgcctcatc cagcttgac aggtactct gtgtacaaa accctgacc taccagta agcgaccac aaaaaggca ggtatgata tgcagctgc ctggctctc tcttcatcc tctgggctcc agccattctc tctggcagt tcattgtagg ggtgagaact gtggaggatg gggagtgtca cattcagttt tttccaatg ctgctgtcac ctttggtaag gctattgag cctctattt gccagtgatc atcatgactg tgctatatg gcacatatcc cgaccagca agacaggat aagaaggac aagaaggagc ctgttgcaa ccaagacccc gtttctcaa gctggtaca aggaaggata gtgaagccaa acaatacaa catgcccagc agtgacgatg gctcggagca caacaaatc cagaatggca aagccccag ggatcctgt actgaaact gtgttcaggg agaggagaag </p>	Homo sapiens

190	3224	Muscarinic acetylcholin e Receptor M2	NP_000730.1	<p>gagagctcca atgactccac ctcagtcagt gctgttgctt ctaatatgag agatgatgaa ataaccagg atgaataaac agttttccact tccctgggccc attccaaaga tgagaactct aagcaaacat gcatcagaat tggcaccag acccaaaa gtgactcatg tacccaaact ataaccacg tggaggtagt ggggtcttca ggtcagaatg gagatgaaaa gcagaatatt gtagcccgca agattgtgaa gatgactaag cagcctgcaa aaaagaagcc tctccttcc cgggaaaaga aagtaccag gacaatcttg gctattctgt tggctttcat catcacttgg gcccataca atgtcatgtt gctcattaac accttttgg cacttgcac ccccaacat gtgtggacaa ttgtttactg gctttgttac atcaacagca ctatcaacc tgctgtctat gcactttgca atgccacctt caagaagacc tttaaacacc ttctcatgtg tcattataag aacataggcg ctacaaggtg a</p> <p>FLFSLACADL IIGVFSMNLV TLYTVIGYWP LGPVVCDLWL ALDYVSNAS VMNLLIISFD RYFCVTKPLT YPVKRTTKMA GMMIAAAWVL SFILWAPALL FWQFIVGVRT VEDGECYIQF FSNAATVFGT AIAAFYLPVI IMTVLYWHIS RASKSRIKDD KKEPVANQDP VSPSLVQGRV VKPNNNMPS SDDGLEHMKI QNGRAPRDPV TENCVOGEEK ESSNDSTSVS AVASNMRRDE ITQDENTVST SLGHSKDENS KQTCIRIGTK TPKSDSCTPT NTTVEVVGSS GQNGDEKQNI VARKIVMTK QPAKKKPPPS REKKVTRTIL AILLAFIITW APYVNMVLIN TFCAPCIPNT VMTIGYWLKY INSTINPACY ALCNATFKKT FKHLIMCHYK NIGATR</p>	Homo sapiens
191	3226	Muscarinic acetylcholin e Receptor M4	LG1143	<p>CCTGGCAGTG CCGATGTTCC GATACTGGCA CAGCAGCAGG TGCCGGAAGG TCCTTTTAAA A GGTGGCGTTG CACAGAGCAT AGCAGGCAGG GTTGATGTTG CTGTGTGACGT AGCAGAGCCA GTAGCCAATG GACCACACCG GGTACGGGAT GCAGCTCTGG CAGAAGGTGT TCACAGGAC CATGACGTTG TGAGGCGTCC CCGTGAGGAT GAAAGCTAAC ANAATGGCAA AGATCGGTCG TGGCACTTTG CGTCCCGGG CCGCATCTG CCGCTTCTTG CGCAGCTGGG TGCAGCGCAT GCTAGCGAAC TTGCGGCCA CGTTGGCCG AGGCGCATGC CAGNCGGCGT GGGAGGGACA ATCTCAGGGC TGGCACACAC TCATGGGCTG GCTGGCTTCG TCAATTTTGG GATCTTGGAC CATCTGGGAG GCTTGGTTGA AGGCCCCCGG CTCGGACTTG CGGGCATGAA TCCAGGCCTT ACTCTANAGG ATCCGCCCTT CTCC</p>	Homo sapiens
192	3226	Muscarinic acetylcholin e Receptor M4	NM_000741	<p>atggccaact tcacacctgt caatggcagc tcgggcaatc agtccgtgag cctggtcacg A tcateatccc acaatcgcta tgagacggtg gaaatggtct tcattgccac agtgacaggc tccctgagcc tggtagctgt cgtgggcaac atcctggtga tgctgtccat caaggtcaac aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc ataggcgctt tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggcccttg ggcgccgtgg tctggacct gtggtgccc ctggactacg tggtagagaa cgcctccgtc atgaaccttc tcatcatcag ctttgaccgc tacttctgag tcaccaagcc tctacattac cctgcccgcg gcaccacaa gatggcagc ctcatgattg tggtgggtgaa gcggacggtg ttcgtgctct gggcgctgc catctgttc tggcagtttg ggtggtggtg ggtactgtcc cccgaacaac actgcttcat ccagttcctg tccaacccag cagtgcactt tggcacagcc attgtgctt tctacctgcc tgtgtgcatc atgacggtgc tgtacatcca catctccctg gccagtgcga gccagtcca caagcacgg cccgagggcc cgaaggagaa gaaagccaag acgtggcct tcctcaagag cccactaatg aagcagagcg tcaagaagcc cgcgccgga ggccgcccgg gaggaactgcg caatggcaag ctggaggagg cccccccg ccagcgtgcca</p>	Homo sapiens

193	3226	Muscarinic acetylcholin e Receptor M4	NP_000732.1	MANFTPVNGS SGNQSVRLVT SSSHNRVETV EMVFIAATVTG SLSLTVTVGN ILVMSLKVN P RQLQTVNNYF LFSIACADLI IGAFSMNLVT VYTIKGYWPL GAVVCDLWIA LDYVVSNASV MNLIIISFDR YFCVTKPLTY PARTTKMAG LMIAAAWVLS FVLWAPALIF WQFVVGKRTV PDNHCFIQFL SNPAVTEGTA IAAFYLPVVI MTVLYIHISL ASRSRVHKHR PEGPKERKAK TLAFLKSPLM KQSVKKPRPG GRPGGLRNGK LEAPPPALP PPRPVADKD TSNESSGSA TQNTKERPAT ELSTEATTP AMPAPPLQPR ALNPASRWSK IQIVTKQTN ECVTAIEIVP ATPAGMRPAA NVAKFASIA RNQVRKKRQM AARERKVTRT IFAILLAFIL TWTPYNNMVL VNTFCQSCIP DTVWSIGYWL CYVNSTINPA CYALCNATPK KTRHLLLCQ YRNIGTAR	Homo sapiens
194	3227	Muscarinic Acetylcholin e Receptor M5	NM_012125	atggaagggg attcttacea caatgcaacc acogtcaatg gcaccccaat aaatcaccaag A cctttggaac gccacaggtt gtgggaagtc atcaccatgt cagctgtgac tgctgtggtgta agcctgatca ccatgtggg caatgtcttg gtcagtatct cctcaaatg caacagccag ctcaagacag ttaacaacta ttactgtctc agttagctc gtgcagatct catcattgga atcttctcca tgaacctcta caccacctac atcctcatgg gacgtgggc tctcgggagat ctggcttggtg accttggct tgcactggac taegtggcca gcaacgttc tgctatgaac ctcttggtga tagttttga ccgttacttt tccatcacaa gaccttgac atatcgggcc aagcgtactc cgaagaaggc tggcatcatg attggcttgg ggaagcggac agttccactg ctctgggcc cagcaatcct ctgttggcag tacttgggtt ggaagcggac agttccactg gatgagtgc agatccagtt tcttcttgag cccacctca ctttggcac tgccattgct gccttctaca tcctgtttc tgctatgacc atcctctact gtcgaaatcta ccgggaaaca gagaagcgaa ccaaggacct ggctgacctc caggttcttg actctgtgac caaagtgtgag aagagaagc cagctcatag ggctctgttc agtccctgct tgcctgttcc tgacccacc ctggccagc gggaaggaa ccaggcctcc tggctatcct ccgcaggag cactccacc actgggaagc catcccaagc cactggcca agcgccaatt gggccaaagc tgagcagctc accacctga gcagctacc tctctcagag gatgaggaca agcccgccac tgacctgtc ctccaagtgg tctacaagag tcagggttag gaaagccag gggagaatt cagtgtgaa gagactgagg aaacttttgt gaaqctgaa actgaataaa gtgactatga caccctaac tacctctgt ctccagcagc tgctcataga ccaagagtc agaatgtgt ggcctataag ttccgattgg tggtaaaagc tgacgggaac caggagacca acaatggctg tcacaagggtg aaaatcatgc cctgcccctt cccagtggcc aaggaacctt caacgaaagg cctcaatccc aaccacagcc atcaaatgac caaacgaaa agagtggctc tagtcaaaag gaggaagca gcccagacac tagtgccat tctcctggcc ttcatcatca catggacccc gtataacatc	Homo sapiens

197	3378	Tachykinin Receptor 3	NP_001050.1	<p>aaggtagtgat ataatgtga caaagacact aataacatgt tagcctccac ccaataataa atgggcttta aattt</p> <p>atggtgtgag gcttgcctgc ggacagtaaa ctgtcaggcg cgagaggag ggacatcgat A taaacctaaa tctgtggcgt tcaatcctca gggcaccggg cgcgtgaaaa ctccagcgga ctctgtgga aaggagatca tgcctcttaa gtctctttcc aacctctcgg tgaccaccgg cgcaaatgag agcggttccg ttcccgaggg gtgggaaagg gattctctgc cggcctcggg cgggaccacc acggagttag tgatccgctg tctgatcccg tccctctacc tgcctcact caccgtgggc ttgctgggca acatcatgct gtggaagat ttcatcaca acagcgccat gaggagcgtc cccaacatct tcatctctaa ctgtcggcgc ggggacttgc tctgtctgct cacctgcgtc cgggtggagc cctgcgcgta ctctctcgac gagtggatgt ttggcaaggc gggtgcaaa ctgacctctg tcatccagct cacttcctg ggggtttccg tgttcactct cactgcccctc agcgcgcgaca ggtacagagc catcgttaac cccatggaca tgcagacgtc agggcattg ctgcggacct gtgtgaaggc catgggtatc tgggtggtct cegtgtgct ggcagttccc gaagcgggtg tttcagaagt ggtcgcgcat agtagcttg ataatagcag cttcacagca tgtatcccat accctcaaac agatgaatta catccaaa ttcattcagt gctcatttc ttggtctatt tctcctacc acttgctatt attagcatt attattata tattgcaaa accttaatta aaagcgaca caatcttct ggagaaataca atgaacatac caaaaaacag atgaaacac ggaacgcct ggctaaaatt gtgcttctct ttgtgggctg ttcatcttc tgttggttc caaacacat cctttacatg tatcgtctt tcaactataa tgagattgat ccattctag gccacatgat tgcacctta gtgcccggg ttctcagttt tggcaattct tgtgtcaacc catttgctct ttacctactc agtgaaagct tcaggaggca tttcacagc caactctgct gtggaggaa gtcctatcaa gagagaggaa ccagctacct actcagctct tcagcgggctc gtatgacatc tctgaaagc atgtctaaaga acatggtgac caattctgtt ttactaaatg ggcacagcat gaagcaggaa atggcaatgt gattttggc attcaactca ctacctggag agaacttagt aa</p>	Homo sapiens
198	3380	Neuromedin B Receptor	NM_002511	<p>TRSRKKRAT PRDPSFNGCS RRNSKSASAT SSFISPPYS VDEYS</p> <p>gtggtgtgag gcttgcctgc ggacagtaaa ctgtcaggcg cgagaggag ggacatcgat A taaacctaaa tctgtggcgt tcaatcctca gggcaccggg cgcgtgaaaa ctccagcgga ctctgtgga aaggagatca tgcctcttaa gtctctttcc aacctctcgg tgaccaccgg cgcaaatgag agcggttccg ttcccgaggg gtgggaaagg gattctctgc cggcctcggg cgggaccacc acggagttag tgatccgctg tctgatcccg tccctctacc tgcctcact caccgtgggc ttgctgggca acatcatgct gtggaagat ttcatcaca acagcgccat gaggagcgtc cccaacatct tcatctctaa ctgtcggcgc ggggacttgc tctgtctgct cacctgcgtc cgggtggagc cctgcgcgta ctctctcgac gagtggatgt ttggcaaggc gggtgcaaa ctgacctctg tcatccagct cacttcctg ggggtttccg tgttcactct cactgcccctc agcgcgcgaca ggtacagagc catcgttaac cccatggaca tgcagacgtc agggcattg ctgcggacct gtgtgaaggc catgggtatc tgggtggtct cegtgtgct ggcagttccc gaagcgggtg tttcagaagt ggtcgcgcat agtagcttg ataatagcag cttcacagca tgtatcccat accctcaaac agatgaatta catccaaa ttcattcagt gctcatttc ttggtctatt tctcctacc acttgctatt attagcatt attattata tattgcaaa accttaatta aaagcgaca caatcttct ggagaaataca atgaacatac caaaaaacag atgaaacac ggaacgcct ggctaaaatt gtgcttctct ttgtgggctg ttcatcttc tgttggttc caaacacat cctttacatg tatcgtctt tcaactataa tgagattgat ccattctag gccacatgat tgcacctta gtgcccggg ttctcagttt tggcaattct tgtgtcaacc catttgctct ttacctactc agtgaaagct tcaggaggca tttcacagc caactctgct gtggaggaa gtcctatcaa gagagaggaa ccagctacct actcagctct tcagcgggctc gtatgacatc tctgaaagc atgtctaaaga acatggtgac caattctgtt ttactaaatg ggcacagcat gaagcaggaa atggcaatgt gattttggc attcaactca ctacctggag agaacttagt aa</p>	Homo sapiens
199	3380	Neuromedin B Receptor	NP_002502.1	<p>NIMLVKIFIT NSAMRSVPNI FISNLAAGDL LLALTCPVVD ASRYFFDEWM FGKVGCKLIP P</p> <p>VIQLTSVGVS VFTLTALSAD RYRAIWNPMQ MOTSGALLRT CVRANGIWW SVLLAVPEAV</p> <p>FSEVARISL DNSSTACIP YPQDELHPK IHSVLIFLVY FLIPLAIISI YYHIAKTLI</p> <p>KSANLPGEY NEHTKKQMET RKRLAKIVLV FVCGFICWF PNHILYMYRS FNYNEIDPSL</p> <p>GHMIVTLVAR VLSFGNSCVN PFALYLLSES FRRHNSQLC CGRKSQERG TSYLLSSAV</p> <p>RMTSLKSNK NMVTNSVLIN GHSMKQEMAM</p>	Homo sapiens

200	3404	Neuropeptide NM_000910 Y Receptor Type 2	Homo sapiens	A
tatcctatcc	ctatcctagc	ttttaacctg	agccagagct	cactacacag gttcctggct
atcgagtctg	aatctgcact	actcaactta	taaaactgtct	gcagacacct gttaggga
ttgtctgata	tggcgccgag	gatctgaact	cgctttacct	tcttgtttgg agcacaggga
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cagcgggttg	atgccattca	ctctgagggtg	tcctggacat	tcaagggttaa aaagaacctg
gaggtcagaa	agacagtggt	ccccaatgac	tctttcacag	aggtacccaa tgtctaagga
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3404	Neuropeptide Y Receptor Type 2	NP_000901.1	MGPIGAED	QYGFQTTPRG	ELVDPDPPEL	IDSTKLEIVQ	WVLIAYCSI	P	Homo sapiens
201				ILLGVGNSL	VIHVVIKFKS	MRTVTNFFIA	NLAVALDLVN	TLCLPFTLT	Y
				VLCHLVPIYAQ	GLAVQVSTIT	LTVIALDRHR	CIVVYHLESKI	SKRISFLIIG	LAWGISALLA
				SPLAIFREYS	LIEIIPDFEI	VACTERKWPGE	EKSIYGTVYS	LSSLILYVL	PLGIISFSYT
				RIWSKLNVH	SPGAANDHYH	QRRQKTKML	VCVVVTVAVS	WLPLHAFOLA	VIDDSQVLDL
				KEYKLITVF	HIAMCSTFA	NPLLYGMNS	NYRKAFLSAF	RCEQRDLDAH	SEVSVTFKAK
				KNLEVRKNSG	PNDSFTEATN	V			
				ggctcaaaag	tgaaaactga	tttcccat	taaaagaaga	gtggatctaa	atggaagcat
				ctgctgttta	attcctggaa	aactggctgg	gcagagcctg	tgtgaaaaa	ctggaatca
				aagataaagg	aacaaaatgg	tttacttaac	agttgtgtgg	gtagttagtt	gcattatgag
				taaaagcaga	gagaagtact	tttgattatt	ttcctgtagt	gaagaaact	tgaacaagaa
				attggtatta	tcaaaagcatt	gctgagagac	ggtgggaaaa	taagttgact	tcaaatcac
				gttaggacct	ggattgagga	ggtgtgcagt	tcgtcgtcc	ctgcttggt	tagaaaaa
				ccactgaaca	gaaatttctc	caggagacca	caggctctcc	ttcatcgcat	tttgattttt
				ttgttcattc	tctagacaaa	atccatcagg	gaatgtgca	ggaacgatt	gccaactata
				ggaatggctt	cgaggagata	aactgaaatt	tgctataata	taatatatt	ggcagatgat
				aggggaactc	ctcaaacatc	agtgggccaa	ttgttcttaa	aaccaattgc	acgtttgggtg
				aaagtttctt	caactctgaa	tcaaaaagctg	aaattctcag	aattacagga	aatgcaaac
				atcatttaat	ttctaatttc	aagttacatc	cgctttatgg	agatactatt	tagataacaa
				gaatacaact	tgatactttt	attgtttatc	ctttttgaac	atgtatgatt	tctgttgtta
				tttacccttt	taaacagata	aatatatttt	tttcaattta	gagtgcgga	atcfaatctt
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				aggatctgaa	ctcgtctttac	cttctgtgtt	ggagcaacgg	gaccgccag	ctagaggagc
				accagcgcac	tgcgccccag	ccctggcgga	gggtgcggag	gatttgttct	cggtgcaact
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				acaaaagaaa	acaactctcg	attggaaagt	gtggaaat	ctcagcccc	acgagcgcg
				gggattctcc	agccccggcc	ctctcccg	cagcctgag	tctctctgc	tcgcctgct
				tgctagggac	cgcagtcctt	cagccgcagc	tggtgtctgc	cgccccct	ttgcctcgc
				ctttcccg	ggcggtattg	gtgaagtctg	cctcaagtcc	aggaggtctg	tcttcgccc
				gccagctctc					

202	3405	Neuropeptide NM_005972 Y Receptor Type 4	atgaacacct ctacacctc tgggcacccc atacaacttc ggccttgctg ctcccaaat ctccacaagg tgaataacaga A agcaaacccc tgggcacccc atacaacttc tctgaacatt gccaggattc cgtggacgtg atggtcttca tctgcaacttc ctacagcatt gagactgtcg tgggggtctc tggtaacctc tgctgatgt gtgtgactgt gagcagaag gagaaacca acgtgacca cctgctttatc gcaaacctgg ccttctctga cttctctatg tgctcctct gccagccgtc gccgcttcac tacaccatca tggactactg gatctttgga gagacctct gcaagatgtc ggccttcac cagtcatgt cgtgacgtgt ctcacatctc tgcctctgctc tgcctgacct ggagaggcat cagctcatca tcaacccaac aggttggaag ccagcattc cacaggccta cctggggatt gtgtcatct ggttcattgc ctgtgctctc tccctgacct tccctggcaa cagcattctg gagatgtct tccacaagaa cactccaag gctctgagt tccctggcga taaggtgttc tgtaccaggt cctggccact ggtcaccac cgcacctat acaccacct cctgctctc ttccagtact gcctccact ggccttcac ctggtctgtt atgcacgat ctaccgggc ctgcagagc agggcgctg gttcacaag ggcacctaca gctgagagc tgggcacatg aagcaggtea atgtgtgtc ggtgtgatg gtgtggcct ttgctgctc cctgctgct ctgcagtgt tcaacagcct ggaagactgg caccatgagg ccatcccat ctgccacgg aacctcatc tcttagtgt ccacttgcct gccatggct ccaactgct caaccttc atctatgct tctcaaac caacttcaag aagagatca aggcctggt gctgactgc cagcagagc cccctcgtga ggagtcggag catctgccc tgtccacagt acatacggaa gtctcaag ggtccctgag gtaagtgc aggtccaat ccatttaa CLMCVTVRQK EKANVTNLLI ANLAFSDFLM CLLCQPLTAV YTINDYWIFG ETLCKMSAFI QCMSVTVSIL SLVLVALERH QLIINPTGWK PSISQAYLGI VLIWIACVL SLPLANSIL ENVFHNHSHK ALEFLADKV CTESWPLAH RTIYTFLLF FQYCLPLGFI LVCYARIYRR LQRQGRVFHK GTYSLRAGHM QQNVVLVLM VFAFVWLPL LHVNSLEDW HHEAIPICHG NLIFLVCHLL AMASTCVNPF IYGLNTNFK KEIKALVLC QQSAPLESE HLPSTVHTE VSKGSRLSG RSNPI	Homo sapiens
203	3405	Neuropeptide NP_005963.1 Y Receptor Type 4	gaaaggctat cggtaacaac tgacctgcca caaagttaga agaaggatt gattcaagaa A agactataat atggatttag agctcgaca gtattataac agacacctg ccacagagaa taatactgct gccactcga atctgattt cccagctcgg gatgactata aaagcagtgt agatgactta cagtatttc tgatgggct ctatacatct gtaagcttc ttggctttat ggggaatcta cttatttaa tggtctctcat gaaaagcgt aatcagaaga ctacggtaaa cttctcata ggcaatctgg cctttctga tatcttggt gtgctgttt gctcacctt cacactgacg tctgcttgc tggatcagtg gatgttggc aaagtcagt gccatattat gcctttctt caatgtgtg cagttttggt ttcacttta atttaatat caattggcat tgtcaggat catatgataa aacatcccat atctaataa ttaacagcaa accatggcta ctttctgata gctactgtct ggacactagg ttttgccatc tgtctcccc ttccagttt tcacagctt gtggaactc aagaacatt tggttcagca ttgctgagca gcaggtattt atgtgttgag tcatggccat ctgattcata cagaattgcc ttactatct ctttattgct agttcagtat attctgccct tagttgtct tactgtaagt catacaag tctgcagaag tataagctgt ggattgtcca acaagaaaa cagactgaa gaaatgaga tgataact aactctcat ccatacaaaa agagtgggc ttagtgaaa ctctctgga gccataaatg	Homo sapiens
204	3406	Neuropeptide NM_006174 Y Receptor Type 5		Homo sapiens

205	3406	Neuropeptide Y Receptor Type 5	NP_006165.1	MDLEIDYYN KTLATENNTA ATRNSDFPVW DDYKSSVDLL QYFLIGLYTF VSLLGEMGNL P	gagttattca ttcatcaaaa aacacagaag aagatatagc aagaagacag catgtgtgtt acctgctcca gaagacctt ctcaagagaa ccaactccag atacttccag aaaactttgg ctctgaaga agtcagctct ctcatccag taagtcatc ccagggtgcc ccaactgtt tgagataaaa cctgaagaaa attcagatgt tcatgaatg agagtaaac gttctgttac aagaataaaa aagagatctc gaagtgttt ctacagactg accatactga tattagtatt tgctgttagt tggatgccac tacactttt ccagtgtgta actgatttta atgacaatct tattcaaat aggcatttca agttggtgta ttgcatttgt catttgttgg geatgatgtc ctgtgtctt aatccaattc tataatgggt tcttaataat gggattaaag ctgatttagt gtcccttata catgtcttc atgttaata attctcactg ttt	Homo sapiens
206	3408	Neurotensin Receptor Type 1	NM_002531	LILMALMKR NQKTTWNFLI GNLAFSIDL VLFCSPTLT SVLLDQWMEG KVMCHIMPEL QCVSVLVSTL ILISIAIVRY HMIKHPIINN LTANHGYFLI ATVMTLGFAL CSPLPVFHS L VELQETFGSA LLSSRYLCVE SWPSDSYRIA FTISLLLVQY ILPLVCLTVS HTSVCRSISC GLSNKENRLE ENEMINLTIL PSKKSQPQVK LSGSHKWSYS FIKHRRRYS KKTACVLPAP ERPSQENHSR ILPENFGSVR SQLSSSKFI PGVPTCFEIK PEENSDVHEL RVKRSVTRIK KRRSVTFYRL TILILFAVS WMPLHLEHVV TDFNDNLISN RHEKLIVYCIC HLLGMSCCL NPILYGFLLN GIKADIVSLI HCLHM	tcaagctcgc ccgcgcgagc cgcagccggg ctgggcgctg tctctggggg cctgggggaa c cgcgcggtt ggagatcggg ggcactgga accgttgga agcgcagc aggagacag cccaggaac cacgggtctt ggagctagga gccgaagct gggagtccgg aggagagcgg agcccgagc ccggagcccg ggcgcgcg tctgggtctg gcgttcccg actggagcgc gcgcgcgtg gtcttgcca cgcgccctc cctgggtcgc cgttcactgc tcccgcctg agacgcgc actctgcgc ggacttccag ccgcggagcc gccggacaga gccgcggact ccagcgcaca ccctgcctt caacagctcc gcgcgcggaa cccgcggcac gccgcgcgc gacctctcc agcgggcgca ggcgcgactg gagagggcgc tctgggcccc ggccttcggc aacgcttcgg gcaacgcgc gcagcgcgc ctggcggcac ccagcagcga gctggacgtg aacaccgaca tctactcaa agtgcgtggt accgcctgt acctggcgt cctcgtggtg ggacgggtg gcaacacggt gacggcgtt accgtggcgc ggaagaagtc gctcagagc ctgcagagca cgggtgcatta ccactgggc agcctgggc tgcagacct gctcacctg ctgctggcca tgcctgga gctgtacaac tctactggt tgcaccacc cttggccttc ggcgacgcg gctgcgcgcg ctactactc ctggcgagc cctgcaccta cgcacggcc ctcaacgtg ccagcctgag tgtggagcgc tactggcca tctgccacc ctccaagcc aagacctca tgtccggaag ccgcaccaag aagttcatca ggcactctg gctcgcctg gccctgctga cgggtcctat gctgttccc atgggcgagc agaaccgcag gccgcagcgc cagcagcgc ggcgcctggt gtgcacccc accatccaca ctgccacct caaggtcgtc atacaggtca acaccttcat gtcttcata tccccatgg tggctactc ggtcctgaac accatcatcg ccaacaagct gaccgtcatg gtaacccagg cggccgagca gggccaaagt tgcacggtcg ggggcgagca cagacattc agcatggcca tgcagcctgg cagggtccag gccctgggc acggcgtgcg cgtctactcg gcagtggta tgcctttgt ggtcgtggtg ctgccctacc acgtgcggcg cctcatgttc tgcacatct cggatgagca gtggactcgg ttctctatg actttacca ctactctac atggtgacca acgactctt ctacgtcagc	Homo sapiens

tccaccatca acccaatcct gtaaacctc gtctctgcca atttcgcca catcttctctg
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ctggatgaga ctgtcttga ggtaccac ccgaacagac agaaggtgt ctctcaggat
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gtctctgggg cgggtgtgt ggtgtgact gaagtcgggt tcccggtga tgtctgtg
ctctatctg tgcactacc gtaggtagg acaggtgtcc atgcaccaca gacacacca

207	3408	Neurotensin Receptor Type 1	NP_002522.1	cgacacctga tctcgtatca ctagcttgcc gccaggtcat gatgtggccc cggaagctgg ccctgcgtgc catgagtcgg tcggtcatgg agtccggagc cctgagccg gccctgggtg acggcacagc cctcacagct caataagct gcccgaagg cctcgatgtg g acaaaaccc gtgtatctct caataagct gcccgaagg cctcgatgtg g	Homo sapiens
208	3452	Opiate Receptor- Like 1 (OPRL1)	NM_000913	YSKVLVTAVY LALFWGVGVG NTVAFTLAR KKSLSQST VHYHLSIAL SDELDVNTDI P PVELYNFIWV HHPWAFGDAG CRGYFELRDA CTYATALNVA SLSVERYLAI CHPFKAKTLM SRSTRKKFIS AIWLASALIT VPMLFTMGEG NRSADGQAG GLVCTPTIHT ATVKVVIQVN TFMSFIFPMV VISVLNTIIA NKLTVMVROA AEQGVCTVGH GEHSTFENAI EGRVQALRH GVRVLRAVNI AFVVCWLPYH VRLMFCYIS DEQWTFPLYD FYHYFYMTN ALFWVSSSTIN PILYNLVSAN FRHIFLATIA CLCPWRRRR KRPAFSRKAD SVSSNHTLSS NATRETTY cctgctctgc acctgctgc gactgccagc cggctgaggg cgggggtctc caggtgggtc A ccagctccca agaggttgc agaagtaccg tacagagtgg atttgcagg cagtggcatg gagccctct tcccgccgc gttctggag gttatctacg gaagcaact tcagggaac ctgtccctcc tgagcccaa ccacagtcg ctgccccgc atctgctct caatgccagc caggcgccct tctgcccc cgggtcaa gtcaccatc tggggtcta cctggccgtg tgtgtcggag ggtccctgg gaaactgctt gtcagtacg tcacctcag gcacacca atgaagacag ccaccaat ttacatctt aaactggccc tggccgacac tctggtctc ctgacgctgc cctccaggc caggacatc cctcgggtc tctggccgtt tgggaatgcg ctgtgcaaga cagtcatgc cattgactac tacaacatgt tcaccagcac cttcaccta actgccatga gtgtggatcg ctatgtagcc atctgccac ccactcgtgc cctcgacgtc cgcacgtcca gaaagccca ggtgtgcaat gtggccatc gggccctggc cctgtgtgc ggtgtcccc ttgccatcat ggtctcgga caggtcaggg atgaagagat cgagtgcctg gtggagatcc ctaccctca ggattactgg gggccgggtg tgccatctg catctctc ttctcttca tctccctgt gctgtcatc tctgtctgt acagcctcat gatccgggg ctccgtggag tccgctgct ctcgggctcc cgagagaaag accggaacct gcggcgcatc actcggctgg tctgtgtgt agtggctgt tctgtgggt gctggagccg tctccaggtc ttcgtgtgg ccaagggt ggggttccag ccagagcagc agactgcgt ggcattctg cgcttctgca cggccctgg ctacgtcaac agctgccta acccactct ctacgcctc ctggatgaga actcaaggc ctgctccgc agttctgtc gtcatctgc cctgcgccc gacgtgcagg tcttgaccg cgtgcgagc attgccaagg acgtggccct ggcctgcaag acctctgaga cgttaccgg gccgcatga ctaggcgtg acctggccat ggtgcctgtc agcccgaga gccatctac gcccaacaca gagctcacac aggtcactgc tctctaggc gacacacct gggccctgag ctccagagc ctggatggg ctttccctg tgggccaagg atgctcgtc ccagagagg accatgtgac atcatgggac aggtcaaaag attagggcca cctccatgg ccagacaga ctgaagctgc cctcctgtg caggcccgag gggacacaag gacctacctg gaagcagctg acatgctgtt ggacggcgt tactggagcc cgtgcccctc cctccccgtg ctcatgtga cctctggcct cctcgtctgt cgttggcag aacctgggt ggcagggcac ccggaggagg agcagcagct gtgtcatct gtgccccca tbtgtgtgt gctgtttgca tggcagggt ccagctgctc tcagccctgt gactctct cagggcagct ggacaggctt ggcacggccc gggaagtga gcaggcagct tttcttggg gtgggacttg	Homo sapiens

209	3452	Opiate Receptor- Like 1 (OPRL1)	NP_000904.1	ccctgagctt ggagctgcca cctggaggac ttgctgttc cgactccacc ttgacgaccg gggccacccc aggagaaagt gtccaggtgg gggctggcag tccctggctg cagaccccg gctggccctc ggaccgcacc tctgaaggtt tctgtgtgc tgcacgggtc aggcctc cctgactgca gcttgactct gggcccaacc cccattccc ttccaggagac cagcgagagg ccctggccat ccctccagcg gtgaatgaa ctatatgctg tggaccgtca acccagccct gctctcagt gtggggcagg tctccagga cgaaggcgc gctgaccac atgggcagct ctgttcacaa agtgaggcc tctgttctt ggtcttgact gctctgttg gttgggagaa gattctctgg ggtcccccac atctcccaa ggtccctc acagcctctc ctttgcctga agccagaggt cagtggccgt gctgtgtgc ggggaagctg tbtggaagga gaagctgtg gccacagcag agtccctgctc tgggacgcc tgcctattt acaagcctca agatggctct gtgtaggccc tgagcttctg gcccaacggg aggatggctt cacagcagag ccagcatgag gggtggggcc tggcagggt tcttgagcc aactgcaa gctgtgtg gctgtgagga cactgcgggg gttg	Homo sapiens
210	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL1)	NM_000273	atgaccagg caggccggcg ggtctctggc acaccgagc cgcctcccg aacacagcc A atggctccc cgcctcagg gacctctgc tgcaccagc gggacgcagc cagcagctc gtgtgagct tccagcccg ggcctccac gcctctgcc tggcagcgg cgggtccgc ttggcgtgg ccctctgca gctgtgcc ggcgcggc cgcggggcc cgggtccccc gcgaagccc cgcggccctc ggtccgcac ctgcggctg gattcccaa tttgttgac ggctgctgg gtatgtgat ccggtccacc gtgtggttag gattcccaa tttgttgac agctctcgg atatgaacca caggaaatt tggcctgctg cttctgctg gggagtgcg atgtgatcc agctgttga cagtgcctgc tctgtgtgc tgtttgcta tgcagtggat gcttatctgg tgatccggag atcgccagga ctgagcaca tctgtctga tcaatcatg gcgtggggcc tggccacct gctctgtg gagggagccg ccatgctcta ctaccctcc gtgtccaggt gtgagcgggg cctggaccac gccatccccc actatgtcac catgtacctg ccctgctgc tggttctctg ggcgaacccc atcctgttcc aaagacagt gactgcagt gctctttac ttaaaggaag acaaggcatt tacacggaga acgagaggag gatggagcc gtgatcaaga tccgattttt caaatcatg ctggttttaa ttattgttg gtttgaat atcatcaatg aaagctttt attctattt gagatgcaa cagatatcaa tggaggttct ttgaaacctg tcagaactgc agccaagacc acatgttta ttatggaaat cctgaatcca gcccaggat tctctgtc ttggccttc tacggctgga caggatgcag cctgggtttt cagtctcca ggaaggagat ccagtggaa tcactgacca cctcgctgc tgaggggct caccatccc cactgatgcc ccatgaaac cctgttccg ggaaggtgtc tcaagtgggt gggcagactt ctgacgaagc cctgagcatg ctgtctgaag gttctgagtc cagcaaat gaaattcaca ctgcaagtga atcctgcaac aaaaatgagg gtgaccctgc tctcccaacc	Homo sapiens

211	3513	Ocular Albinism 1 (Nettleship- Falls) (OAI)	NP_000264.1	<p>catggagacc tatgaagggg atgtgctggg ggtccagacc ccataatcct cagactcaac aattctgtt ctttagaact gtgttctcac cttcccaaca ctgcactgcc gaagtgtagc ggccccaaa ccttgctctc atccacagct agagcttctt cccgaagggc ctttaggata ggagaagggg ttcatggaca cactgtgtgag aatggaagag cccctccagc accactctac agctgctcta gccttagttg ccactaggaa gttttctgag gctggctgta aagtaagtgt aaggtccaca tccctgggga agtagttaaa taaaatagtt atgactg LALGLQLLP GRRPAGGSP ATSPASVRI LRAAACDLL GCLGVIRST VMLGPNFVD SVSDMNHTEI WPAFCVGS A MWIQLYSAC FWLFCYAVD AYLVIRRSAG LSTILLYHIM AWGLATLLCV EGAAMLYPS VSRERGLDH AIPHYVTMYL PLLIVIVANP ILFQKTVTAV ASLLKGRQGI YTENERMGA VIKIRFFKIM LVLIICWLSN IINESLLFYL EMQTDINGGS LKPVRTAAKT TWFIMGILNP AQGFLLSLAF YGWTGCSLGF QSPRKEIQWE SLTTSAAEGA HPSPLMPHEN PASGKVSQVG GQTSDEALSM LSEGSDASTI EIHTASESCN KNEGDPALPT HGDL</p>	Homo sapiens
212	3544	UDP-glucose Receptor (KIAA0001)	NM_014879	<p>gaacagtgtt accttggagc ctacaatgag aggtatttca aatgagtga agcatgactc A tcacagatga aggcctagac gcagatctt taatggaaaa acacttgggc cacttcaaga cgacaaacgc tcactgggca aaacacctc actgaaaaa gacctcatat tatgcaaaaa aaatcttaag aggcctctgc cttcagaagt tacaagatga tcaattcaac ctccacacag cctccagatg aatcctgctc tcagaaacctc ctgatacctc agcagatcat tctgtgtgtg tactgtatgg tcttcattgc gggaaatccta ctcaatggag tgtcaggatg gataattctt tactgtgcca gctctaagag ttctcatcctc tatctcaaga acattgttat tctgacttt gtgatgagcc tgaactttcc ttccaagatc cttgtgtgact caggccttgg tccctggcag ctgaacgtgt ttgtgtgcag ggtctctgcc gtgctcttct acgtcaacat gtacgtcagc attgtgttct ttgggtctcat cagctttgac aggtattata aaattgtaa gcctctttgg acttcttcca tccagtcagt gagtacagc aaacttctgt cagtgtatgt atggatgctc atgtctctcc ttgtgttcc aaattattt ctccacaacc agagtgttag ggaggttaca caataaaaat gtatagaact gaaaagtga ctgggacgga agtggcacaa agcatcaaac tacatcttgc tggccatctt ctggattgtg ttcttttgt taatcgtttt ctatactgct atcacaaaga aaatctttaa gtccacctt aagtcaagtc ggaattccac ttcggtcaaa aagaaatcta gccgcacat attcagcatc gtgtttgtgt ttttgtctg tttgtacct taccatattg ccagaatccc ctacacaaag agtcagaccg aagtcatta cagctgcccag tcaaaagaaa tcttgcggtg tatgaagaa ttcaactctgc tactatctgc tgcaaatgta tgcttgacc ctattattta ttcttcta tggcagccgt ttaggaaat ctatgtgaag aaatgcaca ttccattaaa agtcagaat gactagaca ttccagaat caaagagga aatacacac ttgaaagcac agatactttg tgagttccta ccctcttcca aagaaagacc acgtgtgcat gtgtcatct tcaattacat aacagaaatc aataagatat gtgcccctcat cataaatatc atctctagca ctgcatcca atttagttca ataaaattca aataaagtt tccatgcttt tttgtaacat caaagaaaac ataccatca gtaatttctc taatactgac ctttctattc tctattaata aaaaattaat acatacaatt attcaattct attatattaa aataagttaa agtttataac cactagtctg gtcagttatg gtagaatttt aatagtaaa taaaacaaa cataatcaaa gacaactcac tcaggcatct tcttttctta aataccagaa</p>	Homo sapiens

atcgtgctcg ctactgcta cggccttacc agcttcaaga tctggcagaa ctgcgggctc
aagaccgtg cagcggcggc ggcgagggc ccagagggc cgcgggctgg cgtggggggg
cgcgtggccc tggcgtgtg cagcagcgtc aagctcatc ccaaggccaa gatccgcag
gtcaagatga ctttcattcat cgtcgtggcc ttcatcgtgt gctggacgcc ttctctctc
gtcagatgt ggagcgtcg ggatgccaa gcgccaaag aagctcggc ctcatcatc
gtcatgctcc tggcagcct caacagctgc tgaacccct ggatctacat gctgttcacg
ggccacctct tccagaaact cgtgcagcg ttctgtgtct gctcggccag ctacctgaag
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caggccagg gctgcagcct gaggtccagg ctgtcgtgc ataagtgc tctcctagg
tgatggcgta tgttgtgta taagtacct atcagtttgt atccctccc tcttgggg
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tcattctggg atattgtga aagcgtgtaa tataggattg gtgaccaatt ggtcaggaa
gtccagtgt ctggacttg gtaagcagt ggggttggga cctcagatgg gaagggtggt
gctaaagtcc tctgacctc aaagtgtatt tgcctttaa cgaacaaatg ctggggctct
tggggaccag ctgtcagag ggtgacctc agagaagggg attacctgt aagacctct
ggcgcagtgg acctattga acttgggtta aaatgttta agaagctaatt gtttaagaag
catttggaa agaaaagaa ataatgttat ccagatagga aaagagaag taaactatt
tgcagatgac acagtttgt atatagaaa tccataggaa ctacacaca cacacaca
cacacagca cacagtatt agaactaa agcaagtcc gcaagtttc aagatacaag
atcaatatac aaaaatgaat tgtattctt tatactagca acaacaata tgaacacgaa
gttaataat tccattata ataccatcag aaagaataaa ataggaatca acttaacaaa
acaagtcaa gactgaaac tacaaaattg gaaagaatt aaagaaggct taataaatg
gaaagacatc ctgtgttcat ggatcagact tagtattgtt aagatggcaa tactatccta
actgacatgc agattcagtg caatccttat gaaatcata gctggctttt ttacagaaat
tgataagcta gtcccaaat tcataaagaa atgcaaggga cccagatata caataagcc
ttgaaaaaga acaagtgtg tggattcaca ctctctgatt tcataatta cgataaagg
aatcagctca gtgtgttact gggttaagga tagacatacg gacgagaata aagatcacg
atatgaacac ttatacttac ggtcaattga ttttgacaa ggttcccaa acaattcaat
agagaaaagga gagtctttc acaaatggc accgagacaa tgatatgcaa gtgcaaaaga
atgaggttg acccttactc acactatgt caaaaatcaa ctcaaacgc atccagatc
taaatataag agctgaaact ataaatctt agaaagaaac ataggcatag atcttgttaa
cottgaatta ggcagtgggt tcttagatat gataccaaag acacagcaa ccaatggaaa
aataggtaaa ttggacttaa tcaagatttg aagcttttgt gattgaaaag acctatcaa
gaaggtgaaa agataacctg cagaatggga gaaatatatt gcgagtcata tatatgata
ggggcttgta tctggaatat ataaataact cttataacac acaataagg agaaaaata
atcaatttaa aaaaatgggt aacggtttga atagacattt ctcaaaagaa gatatgcaa
tggctactaa gcacatgaaa atactcaac attattattc attagggaaa tgcaagtcaa
aatcacaatg agattccagt ttacaatcac taggtgggt acaataaaa gatggacaag

215	3582	Oxytocin Receptor	NP_000907.1	MEGALANUS AEAANASAP	PGAEGRNRTAG	PPRNEALAR	VEVAVLCLIL	LLALSGNACV	P	Homo sapiens	
				LLALRTTRQK	HSRLFFFMKH	LSIADLVAV	FQVLPQLLWD	ITREFYGPLD	LCRLVKYIQV		
				VGMEFASYLL	LLMSLDRLCIA	ICQPLRSLSRR	RTDLAVLAT	WLGCLVASAP	QVHIFSLREV		
				ADGVFDCWAV	FIQPWGPKAY	ITWITLAVYI	VPVILVATCY	GLISFKIQW	LRLTKAAAAA		
				AEAPEGAAG	DGGRVALARV	SSVKLISKAK	IRTVKMTFII	VLAFLVCWTP	FFFWQMSVM		
				DANAPKEASA	FIIVMLLASL	NSCONPWIM	LFTGHLFHEL	VQRFLLCCSAS	YLKGRRLGET		
				SASKXSNSS	FVLSHRSSQ	RSCSQPSTA					
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	NM_002564	cgccgagagg	caccccgaga	ggagaagcgc	agcgagtggt	cgagagagagc	ccctgtgtgc	A	Homo sapiens
				agcagcacta	cctgcgccaga	aaatgtctgg	agcgtggcgc	tggcccccagc	cctggggacc		
				tggttttctt	gtttcccgca	gagttccctg	cagcccgctc	caggtccagc	cgtgtgcatt		
				catgagtgag	gaaccgctgc	agcgcctgag	caccccgacc	tggagagcag	ggcgtgtgca		
				ggcgcatggc	agcagacctc	ggccctctga	atgacacat	caatggcacc	tgggagtggt		
				atgagctggg	ctacaggtgc	cgcttcaacg	aggacttcaa	gtacgtgtgc	ctgcctgtgt		
				cctacggcgt	gggtgtcgctg	cttgggctgt	gtctgaacgc	cgtggcgctc	tacattctct		
				tgtgcgcgtc	caagacctgg	aatgcgtcca	ccacatatat	gttccacctc	gctgtgtctg		
				atgcaactga	tggcgctccc	ctgcgcgtgc	tggctctatta	ctacgcccgc	ggcgaccatt		
				ggcccttcag	cacggtgctc	tgcaagctgg	tgcgcttctc	cttctacacc	aacctttact		
				gcagcatcct	cttctcacc	tgcatacagc	tgcacccgtg	tctggcgctc	ttaacacctc		
				tgcgtccctc	gcgtgtgggc	cggtcccgct	agcctgcgcg	gggtggccggg	gccgtgtggg		
				tgttgtgtgt	ggcctgtccag	gcccccgctg	tctactttgt	caccaccagc	gcgcgcgggg		
				gccgcgtaac	ctgccacgac	acctcggeac	cgcagctctt	cagcgccttc	gtggcttaca		
				gtcagtgcat	gctgggactg	ctcttcgcgg	tgccttttgc	cgctaccttc	gctgtttacg		
				tgtctatggc	tgcggcgactg	ctaaagccag	cctacgggag	ctcggggcgc	ctccctaggg		
				ccaagcgcaa	gtcgtgtgcg	acctatcgcc	tgggtgtggc	tgtcttcgcc	ctctgtctcc		
				tgcctatcca	cgtcaaccgc	acctctact	actccttcgc	ctcgtctggac	ctcagctggc		
				acacctcaa	cgccatcaac	atggcctaca	aggttaccgc	ggcgtgtggc	agtgtaaca		
				gttgccctga	ccccgtgctc	tacttccctg	ctggggcagag	gctctacgc	tttgcccgag		
				atgccaaagc	accactggc	cccagccctg	ccaccggcg	tgcggcagg	ctgggcctgc		
				gcagatccga	cagaactgac	atgcagagga	taggagatgt	gttgggcagc	agtgaggact		
				tcaggcgagc	agagtcaccg	ccgctgtgta	gcgagaacac	taaggacatt	cgcctgttagg		

Homo
sapiens

P

217 3589 Purinergic NP_002555.1 agcagaaac ttcagcctgt gcagggtttat attgggaagc ttagaggac caggacttgt
 Receptor cagacgcca cagtctccc agatatggac catcagtac tcatgctgga tgaccccatg
 P2Y, G- ctcgctatt tgacagggc tcagatatatt cactctggg tccagagtca actgttccca
 protein tacccttag tcatcgtttg ttggtataag ttgggggaat taagtttcaa gaaaggcaag
 coupled, 2 agtcaaggt caatgacacc cctggcctga ctcctatgca agtagctggc tgtactgcca
 (P2RY2) aggtacctag gttggagtcc agcctaata agtcaaatgg agaaacagcc ccagagagga
 agtggtctta ccaagatcac ataccagagt ctggagctga gctacctggg ttggggggcca
 agtcacaggt tgcccagaaa accctggtaa gtaaatgaggg ctgagtttgc acagtgtctt
 ggaatggact ggtgtgccag gtggacttag ctctgaggag taccctcagc ccaagagatg
 aacatctggg gactaatatc atagacccat ctggaggctc ccatgggcta ggagcagtgt
 gaggtgtaa cttatactaa aggttgtgtt gcctgctaaa aaaaa
 gaggctgtaa cttatactaa aggttgtgtt gcctgctaaa aaaaa
 NP_002555.1 TINGTWDGE LGYRCFNEF FKVLLPVSY GVCVLGLCL NAVALIYFLC
 RLKTNWASTT YMFHLAVSDA LYAASLPLV YYARGDHP FSTVLCKLVR FLEYTNLYCS
 ILFLTICISVH RCLGVLRLR SLRWGRARYA RRVAGAVWVL VLACQAPVLY FVTSARGGR
 VTCHDTSAPF LFSREVAYS VMLGLLFAVP FAVILVCYVL MARLLKPAY GTSGLPRAK
 RKSVRTIAVV LAVFALCFIP FHTRTLIYS FRSLDLSCHT LNAINMAYKV TRPLASANS
 LDPVLYFLAG QRLVRFARDA KPTGSPSPAT PARRRLGLRR SDRTDMQRIG DVLGSSSEDFR
 RTESTPAGSE NTKDIRL

Homo
sapiens

A

218 3595 Purinergic NM_002563 cccctcccg cggggatcca gttgcctgc tccctccgc tgcctggctt ttcgatgct A
 Receptor tgtcgccc ctggccgcg ctgcctctc gcgcctctc accctcctga gcgcgcgct
 P2Y1 aagtcgagga ggagagaatg accgaggtgc tgtggccgcg tgtccccaac gggacggagc
 ctgccttctt ggcgggtccg ggttcgtctt gggggaaacg caggttgccc tccactgccc
 cgtctctc gtcgttcaaa tgcgcttga ccaagacggg ctccagttt tactacctgc
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 acccctcaa gtccctggc cggctcaaaa agaagaatgc gatctgac agcgtgctgg
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 tgtgtcttt caatgacag gttatgcca cgtatcaggt gacaagaggt ctagcaagtc
 tcaacagttg tgtggaccc attctctatt tcttggcggg agatacttic agaaggagac
 tctccgagc cacaaggaaa gcttctagaa gaagtgggc aaatttgcaa tccaagagt
 aagacatgac cctcaatatt ttactgagt tcaagcagaa tggagatata agcctgtgaa
 ggcaagaaga tctccaaa cctctctgtt gtaatatgtt aggatgctta acagaatcaa
 gtacttttcc cctctttaa tttctagttt agaaaaaat caaaccaaga aatatgtgag

219	3595	Purinergic Receptor P2Y1	NP_002554.1	<p> ttaaataaat aatagaagta gaaatgcca catcacact tagcttggtt gggttgctt tcacagtctc tcttcttct gactagaagt atgtataata aacaataact acctagttaa acattactt tctctttgc ctttaaaatg tgcaggctt tctgtttaa gtgtgtgtgc acatgagtac tggggtgtt ttgatatta gtaattctc taagaaaact agccctgc aacttgatt tgtggttat ctagcttta ttgtttttt aaaaaccaca gtaggataaa aaaatctata ttctagaaa tatctagcat ggtataaac aaacactaa actcatcagt tcatecgga tcagatcaat ggtctctga ggggtgtt ttttcagtg tctataagc atagatgata gttgactgag ttcttttag gcatgaata gacaagtaa gctaataat ttaaagcct gaaaagtgt tttttccag ttattcttg aaaagcttc attatatatt gggtgctaaa ttttgatgg gaaagcctg catatatatt cgtactggtt aatgcattc aaaaataa aagtgcattg atttctctg taacacacat gagctctctt agacatctg tgataaagag catttactg cccactgt gtgcaatgcc ttaggacttt gttgtgttc caggacaagt gttcactcac atctgtaaaa acaattttta gaattgcaaa taaattacag accaaagatt gagtaagtc aaataactgt tagtaagttg aaggatatgt gacaggagga cagtatttca gaaaaggaga ggttgacagt catccacaag gcatagctc caagtatact ctcaaatgta tgaagcaact ggggtgggca gaagacattt tagaatgagg gcctttagt taaattaaag tcatggtgga gaagactctt gctccacca agtgtttgaa aacaaaaat acgatataaa aaaaaaaa aaa acgataaaa aaaaaaaa aaaa MTEVLPVPV NGTDAFLAG PGSSWGNSTV ASTAAVSSSF KCAITKTFQ FYILPAVYL P VFIIIGFNGS VAIWMFVFM KPWGGSVYM ENLALADFLY VLTIPALIFY YFNKTDWIFG DAMCKLQRFI FHVNLGYSIL FLTCISAHRY SGVVPKLSL GRLLKKNKNAIC ISVLWLVIV VAISPILFYS GTGVRNKTI TCYDTSDEY LRSYFIYSMS TTVAMFCVPL VLIIGCYGLI VRALIYKDLID NSPLRRKSIY LVIIIVLTFEA VSYIPEHVMK TMNLRLDFE QTPAMCAFND RVYATYQVTR GLASLNSCVD PILYFLAGDT FRRRLSRATR KASRRSEANL QSKSEDMTLLN ILPEFKQNGD TSL </p>	Homo sapiens
220	3596	Purinergic Receptor P2Y5	NM_005767	<p> ctgatgaaag tgcttccaaa ctgaaaattg gacgtgcctt tacgatggta agcgttaaca A gtcctccactg cttctataat gactcttta agtacacttt gtatgggtgc atgttcagca tggtgtttgt gcttggtgta gtatccaatt gtgtgacct atacattttc atctgcgtcc tcaaagtccg aaatgaaact acaactaca tgattaactt ggcaatgtca gacttgcttt ttgtttttac ttacccttc aggtattttt acttcacaac acggaattgg ccatttggag atttactttg taagatttct gtgatgctgt ttatatacaa catgtacgga agcattctgt tcttaacctg tattagtga gatcgatttc tggcaattgt ctaccattt aagtcaaaaga ctctaagaac caaaagaaat gcaagattg ttgcaactgg cgtgtggtta actgtgacg gaggaagtgc accgcggtt ttgttcagt ctaccactc tcagggtaac aatgcctcag aagcctgctt tgaaaatttt ccagaagcca catggaaaac atatctctca aggattgtaa ttttcatcga aatagtggga tttttattc ctctaattt aaatgtaact tttcttagta tggtgctaaa aacttcaacc aaaccagtta cattaagtag aagcaaaaata acaaaaacta aggtttttaa aatgattttt gtacatttga tcataattctg ttctgtttt gtcccttaca atatcaatct tatttatat tctctgtga gaacacaaac atttgttaat tgcctagtag tggcagcagt aaggacaatg taccacatca ctctctgtat tgctgtttcc aactgttgtt ttgacctat agtttactac ttatcatcgg acacaattca gaattcaata aaatgaaaa </p>	Homo sapiens

221	3596	Puriner Receptor P2Y5	NP_005758.1	actggtctgt caggagaagt gacttcagat tctctgaagt tcatgggtga gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatatta caatgaatct gctgcctgaa ataaaacct taggactcac tgggacagaa ctttcaag MSDLLFVFTL PFRIFYFTTR NWPFGDLLCK ISVMLFYTNM YGSLFLTICI SVDRLAIVY PFKSKTLRTK RNAKIVCTGV WLTIVIGSAP AVFVQSTHSQ GNNASEACFE NFPEATWKTY LSRIVIFIEI VGFFPLILN VTCSSMLKT LTKPVTLSRS KINKTKVLKM IFVHLIIFCF CFVPYNINLI LYSIVRTQTF VNCWVAAR TMYPTITCIA VSNCCFDPV YPFTSDTQN SIKMNWSVR RSDRFSEVH GAENFIQHNL QTLASKIFDN ESAA	Homo sapiens
222	3597	Puriner Receptor P2Y6	NM_004154	aaggacagag gaggggacct tctgtcagc tggctgggag cagaggtggc ttgtctttt A cggaagaact ggttctgtgg aattgtgtct tatttccctc caaggatcaa ggacctgtc tggggctacc tcagggtccc acagatgag gggctgggtt tcagatgagt ttctgtctg cctgtcatct ggatagtgtc taaaaatttg caaactgctt tctgtcagt gcttgcaca ttcttcatga cactcctgat atgtctcaca gtttccctcat ctgtgcctc tccagacttc tgccagaaca ttgcacgga cagtttcagg cacagaacty actggcagca ggggtgtctc cacagatggg aattgtctcc agcatttcac ggaactgcaag cagagcaatt gtaactctt ggataacaag acctctgcca gaagaacctat ggctttggaa ggcggagttc aggtcagga gatgggtgag gtcctcagtg agccctgccc ctctgggctt gccaccacc acctgtgtct ccatggatg ggacaatggc acagggccagg ctctgggctt gccaccacc acctgtgtct accgcagaaa ctccaagcaa ctgctgtctc cacctgtgta ttccggcggg ctggcggctg gcctgcgct gaacatctgt gtcattacc agatctgac gtcctgcgg gccctgacct gcacggcctg gtacacctc aacctgtctc tgggtgacct gctatatgcc tgtccctgc ccctgtctat ctacaactat gcccaaggtg atcactggcc ctttggcgac ttccgtctgc gcctgggtccg ctctctctc tatgcaaac tgcacggcag catctcttc ctacctgca tcagcttcca gcgtacctg ggcactctgc acctgtggc cccctggcac aaagtgggg gccgcgggc tgcctggcta gtgtgtgtag ccgtgtggct ggccgtgaca acctagtgc tgccacagc catctctgct gccacaggca tccagcgtaa ccgcaactgc tgcctatgac tcagcccgcc tgccttgccc acctactata tgcctatgg catggctctc actgtcatcg gcttctctgt gcccttctgt gccctgtctg cctgtactg tctcctggcc tgcgcctgt gccgcagga tggcccgga gagcctgtgg cccagagagc gcgtggcaag gcggcccgca tggcctgggt ggtggtgtgt gcccttgcca tcagctctct gccctttcac atcacaaga cagctacct ggcagtgcgc tcgacggccg gcgtccctct cactgtattg gaggccttg cagcggcta caaaggcacg cggcgggttg ccagtggcaa cagcgtgctg gaccatcc tcttctact caccagaag agttccgccc ggcgaccaca tgaactccta cagaaactca cagccaaatg gcagaggcag ggtcgtctgag tccctcaggt cctgggcagc cttcatatt gccatttgt cggggcacc aggagcccca ccaaccccaa acctgcgga gaattagagt tcagctcagc tgggcatgga gtaagatcc ctcaaggac ccagaagctc accaaaact atttctcag cccctctct gccccagacc ctgtgggcat ggagatggac agacctgggc ctggctcttg agaggctcca gtcagccatg gagctgtgg gaaaccacat taagtgtctc acaaaaaac agtgtgactg tctctgcaa aa	Homo sapiens

223	3597	Purinergic Receptor P2Y6	NP_004145.1	MEWNGTGQA LGLPPTTCVY RENFKQLLP PVYSAVLAAG LPLNICVITQ ICTSRRALTR P	Homo sapiens
				TAVYTINLAL ADLLYACSLP LLIYNYAQGD HWPGDFEACR LVRELFYANL HGSILFLFCI	
				SFYRIGICH PLAPWHKRG RRAAWLVCVA VWLAVTTQCL PTAIFAATGI QNRRTVCYDL	
				SPPALATHYM PYGMALTVIG FLFPFAALLA CYCLIAACRLC RQDGPAPFVA QERRGKAARM	
				AVVAAAFAI SFLPFHITKT AYLAVRSTPG VPCTVLEAFA AAYKGTRPPA SANSVLDPII	
				FYFTQKKFRR RPHELLQKLT AKWQRQGR	
224	3599	G Protein- Coupled Receptor 23 (GPR23)	NM_005296	cctacgggtc catagtgtca gagtgggtgaa cccctgcagc cagcaggcct cctgaaaaaa A	Homo sapiens
				aagtccatgg gtgacagaag attcatgtac ttccaattcc aagattcaaa ttcaagcctc	
				agaccagggt tgggcaatgc tactgccaat aatacttga ttgttgatga ttcttcaag	
				tataatctca atgggtgctgt ctacagtgtt gtattcatct tgggtctgat aaccaacagt	
				gtctctctgt ttgtctctcg ttccgcatg aaaaatgagaa gtgagactgc tatttttacc	
				accaatctag ctgtctctga ttgcttttt gtctgtacac taccttttaa aatattttac	
				aacttcaacc gccactggcc ttgtggtgac accctctgca agatctctgg aactgcattc	
				cttaccaca tctatggggag catgctcttt ctacactgta ttagtgtgga tcgtttccctg	
				gccattgtct atccttttcg atctgtact attaggacta ggaggaaattc tgcattgtg	
				tgtgtggtg tctggatcct agtctcagt ggcgttattt cagctctttt gttttccacc	
				actaatgtca acaatgcaac caccacctgc ttggaaggct tctccaaacg tgtctggaag	
				acttatttat ccaagatcac aatatttatt gaagtgttg ggtttatcat tctctataa	
				ttgaatgtct ctgtctcttc tgtgtgtgctg agaactcttc gcaagcctgc tactctgtct	
				caaatgggga ccaataagaa aaaagtactg aaatgatca cagtacatat ggcagtcttt	
				gtggtatgct ttgtacccta caactctgtc ctctcttgt atgcctgtgt gcgtcccaa	
				gctattacta attgcttttt ggaagatttt gcaagatca tgtaccctaat cacottgtgc	
				cttgcaactc tgaactgttg tttgacctt tcatctattt acttaccctt tgaatccttt	
				cagaagtctct tctacatcaa tgccacatc agaattggagt cctgttttaa gactgaaaca	
				cctttgacca caaagccttc cctccagct attcaaggag agtggagtga tcaacaaca	
				aataatgggtg tgaattaat gctagaatcc accttttagg tatgagaaat gtgttcaggt	
				ccagatattgg ttctctctat aatttttctt atgctataaa ctgaagattt gaagctaattg	
				atactgagaa taatgcacca aatccagtca gatacttttg ttgaaaggtg tactgtagag	
				tttttatgct tgtttgttc agtaattata ggtcaaatct aattacaaca accaagatgg	
				attgccaaac tcttctgctt ggttgaattt tcatgtatc gcattatcca ggtggctagt	
				ggcatttgat aatatagaga tgactttgaa acttcaaaa aggtatttct attocaaatg	
				tattttgtaa ttaggttggg cctataaata tagaacaatt tcagggattt ttaaaaaatt	
				gtgttactac tgatatatgc tagttttatt ttattttttt ggactgtcat tgagtttatt	
				ttagcacaag aatatbttta gcctaacatt attataaga aatgtgtcaa atttttaaca	
				ttggtaaaat atgttatgtg catttgaaa acagaaaaa aatggcgttg gcattgtacgt	
				gggtgggaag aaaaagaaaa ttaacaggat ttacacaatt ataataacca gcagtgtgag	
				tttaaaaaac ttcgttgttt ttacoccaa ttaaaatttt catgtcaaac ttcaagcca	
				gaaagctgct aaatacgtgt ctggcaggta aaagctggaa aattacttaa acagggaaa	
				tgtcaataaa aaactttgag caacaccaac atatttttc ttaaatgtc acgttatctt	
				cattttggga aactaggttc tataaatat ttatctctcc tgttatactt tggagcacag	
				cacagccaga aagggtgtgc atttgtgcc aggtcaggag caaattgaaa aaaaaataa	

225	3599	G Protein- Coupled Receptor 23 (GPR23)	NP_005287.1	agtaatacta aaaaatcaaa ctataaacc aaacattta ttaaaacctg aattaatcct ttttgaggg aggagtagag atataaacc tgaataact tattctttct tatcgaattt tggagcctaa ttagccagg agctgctgaa tttgtgccc tggattggaa ccaataaaaa aaaaaaaaa aaatttcct LFVFCFRMKM RSEFAIFITN LAVSDLLFVC TLPFKIFYNF NRHWPFGDTL CKISGTAFLT NIYGSMLFLT CISVDRFLAI VYPRSRITR TRNSAIVCA GWMILVLSGG ISASLFSITN VNNATTTCFE GFSKRWKTY LSKTIFIEV VGFIPLILN VSCSSVWLRT LRKPATLSQI GTNKKKVLKM ITVHMAVFV CFVPYNSVLF LYALVRSQAI TNCFLERFAK IMPYITLCLA TLNCCFDPTI YYFTLESFQK SFYINAHIRM ESLFKTETPL TTKPSLPAIQ EEVSDQTNN GGELMLESTF	Homo sapiens
226	3638	Parathyroid Hormone Receptor 2 (PTH2)	NM_005048	ggccggtggc ccggggccga ccacccagg tgcgcgtcgt tactggccac aagttgtctc A tgggccagcc aagttggcaa ctggaagct tctccgggc tctggaggag ggtccctgct tcttctaca gccgttccgg gcatggccgg gctggggggc tgcgtccacg tctgggggtg gctaatgctc ggcagctgcc tctggccag agccagctg gattctgatg gcaccattac tatagaggag cagattgtcc ttgtgctgaa agcgaagta caatgtgaac tcaacatcac agctcaactc caggaggagg aagtaattg ttccctgaa tgggatggac tcatttgtg gccagagga acagtggggg aaatatcggc tgtccatgc cctcctata ttatgactt caaccataaa ggagtgtctt tccgacactg taacccaat ggaacatggg atttatgca cagcttaaat aaacatggg ccaattattc agctgctt cgctttctgc agccagatat cagcatagga aagcaagaat tcttgaacg cctctatgta atgtataccg ttgctactc catctctttt ggttcccttg ctgtggctat tctcatcatt ggttacttca gacattgca ttgcactagg aactatatcc acatgactt atttgtct ttcagtctga gagctacaag catctttgtc aaagacagag tagtccatgc tcacatagga gtaaggagc tggagtcctt aataatgcag gatgacccac aaattccat tgaggcaact tctgtggaca aatcacata tatcgggtgc aagattgctg ttgtgatgtt tattacttc ctggtacaa attattattg gatcctgggtg gaagtctct acctgcataa tctcatctt tggcctttct ttccggacac caaataacctg tggggcttca tcttgatagg ctgggggttt ccagcagcat ttgtgcagc atgggctgtg gcacagagcaa ctctggctga tgcaggtgc tgggaactta gtctggaga catcaagtgg attatcaag caccgatctt agcagctatt ggcctgaatt ttattctgtt tctgaatacg gttagagttc tagctaccaa aatctgggag accaatgcag ttgggcattga cacaaggagg caatacagga aactggccaa atcgacactg tctcgtgctc tagtctttgg agtgcattac atcgtgttctg tatgctgcc tcaactcttc actgggctcg ggtgggagat ccgcatgcac tgtgagctct tctcaactc ctttcagggt ttcttfgtgt ctatcatcta ctgctactgc aatggagagg ttccaggaga ggtgaagaag atgtggagtc ggtgaaatct ctccgtggac tggaaaagga caccgccatg tggcagccgc agatcggctc cagtgcctcac caccgtgacg cacagacca gcagccagtc acagtgggc gccagcacac gcatggtgct tatctctggc aaagctgcca agatggccag cagacagcct gacagccaca tcaacttacc tggctatgtc tggagtaact cagagcagga ctgctgcca cactcttcc acgaggagac caaggagat agtgggaggc agggagatga tattctaag gagaagcctt ccaggcctat ggaatctaac ccagacactg aaggatgcca aggagaaact gaggatgttc tctgaatgga	Homo sapiens

227	3638	Parathyroid Hormone Receptor 2 (PTHr2)	NP_005039.1	<p> MAGLGASLHV WGWLMLGSL LARAQLDSG TITIEEQIVL VLKAKVQCEL NITAAQLQEGE P GNCFPEWDGL ICWPRCTVGK ISAVPCPPYI YDENHKGVAE RHCNPNGTWD FMHSLNKTWA NYSDCILRFLQ PDISIGKQEF FERLYVMYTV GYSISFGSLA VAILIGYFR RLHCTRNYTH MHLFVSFMLR ATSIFVKDRV VHAHIGVKEL ESLNQDDDPQ NSIATSVDK SQYIGCKIAV VMFIYFLATN YWILVEGLY LHNLIFFVAFF SDTKYLMGFI LIGWGFPAAF VAAWAVARAT LADARCWELS AGDIKIWIQA PILAAILGNF ILFLNTVRVL ATKIWETNAV GHDRKQYRK LAKSTLVLVL VEGHYIVFV CLPHSFTGLG WEIRHCELF FNSPQGFVS ILYCYNGEV QAEVKKMWSR WNLSVDWKRT PPCGSRRCGS VLTIVTHSTS SQQVAASR MVLISGKAAK IASRQPDSDHI TLPGYVMSNS EQDCLPHSFH EETKEDSGRQ GDDILMEKPS RPNESNPDTE GCQGETEDVL </p>	Homo sapiens
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NM_000316	<p> cggaggagac cggccctagg cggtagcgat ggggaccgcc cggatcgac cgggctggc A gctcctgctc tgctgccccg tgctcagctc cgcgtacgcg ctggtggatg cagatgacgt catgactaaa gaggaacaga tcttctgctg gcacgtgctc caggcccatg gcgaaaaacg gctcaaggag gtcctgcaga gccagccag cataatggaa tcagacaagg gatggacatc tgctccaca tcagggaagc ccaggaaaga taaggcatct gggaagctct accctgagtc tgaggaggac aaggaggcac ccactggcag caggtaccga gggcgcccc ctgtgccgga atgggaccac atcctgtgct ggcgctggg gccaccaggt gaggtggggtg ctgtgccctg tccggactac attatgact tcaatcacaa aggccatgcc taccgacgt gtgaccgcaa tgccagctgg gagctggtgc ctgggcacaa caggacgtgg gccactaca gcgagtgtgt caaatcttc accaatgaga ctctggaacg ggagtgttt gaccgctgg gcatgattta caccgtgggc tactcgtgt cctggcgtc cctcaccgta gctgtgctca tctggccta ctttaggcgg ctgcactgca cgcgaacta catcacatg cactgttcc tgtccttcac gctgcgcgc gtgacatct tcgtcaagga cgctgtgctc tactctggcg ccagcttga tgaggctgag cgcctcacg aggaggagct gcgcgcac cccagggcg cccggccgc tgccaccgc gctgcgggt acgcgggtg cagggtgggt gtgaccttct tcttactt cctggccacc aactactact gattctgtgt ggaggggctg tacttgaca gcctcatctt </p>	Homo sapiens

229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NP_000307.1	<p> catggccttc ttctcagaga agaagtacct gtggggcttc acagtcttcg gctgggggtct gcccgtgct ttcgtggctg tgtgggtcag gtgcagagct accctggcca acaccgggtg ctgggacttg agctccgga acaaaagt gatcatccag gtgccatcc tggctcccat tgtgtcaac ttcctctct tcataatat cgtccggtg ctcggccacca agctcgggga gaccaacgc ggcgggtg acacacgga cagtagccg agctgctca aatccacgct ggtgctcatg cccctcttg ggtccacta catgtcttc atggccac caccacga ggttcaggg acgtctgga agtccagat gactatgag atgtcttca actcttcca gggattttt gtccaatca tatactgtt ctgcaatgg gaggtacaa ctgagatcaa gaaatcttg agcgtgga cactggcact ggaactcaag cgaaggcc gcagcgggag cagcagctat agctacggc ccagtgtgt ccacacaagt gtgaccaa tggccccc tgtggactc ggcctgccc tcagccccc cctactgcc actgccacca ccaacggcca ccctcagctg cctggccatg ccaagccag gacccagcc ctggagacc tcgagaccac accactgcc atggtgtct ccaaggaga tgggttctc aacggctct gtcaggcct ggacgaggag gcctctggc ctgagcggc accctgccc ctacaggaag agtgggagac agtcattgga ccaggcgtg gggcctggc ctgctgacat agtgatgga cagatggacc aaaagatgg tggtagatg atttccact caggcctg gccaagag aaaaacaggg aaaaaagaa aaaaaaaga aaagaa </p>	Homo sapiens
230	3732	PACAP Receptor Type 1	NM_001118	<p> SIMESDKGWT SASTSGKPRK DKAGKLYPE SEEDKEAPTg SRYGRPCLP EWDHILCWPL GAPGEVAVP CPDIYDFNH KGHAYRRCDR NGSWELVPGH NRTWANYSEC VKFLTNETRE REVFDRLGMI YTVGYSVSLA SLTVAVLILA YFRRLHCTRN YIHMHLFSF MLRAVSIFVK DAVLYSGATL DEARLTEE LRAIAQAPP PATAAAGYV CRVATFFLY FLATNYWIL VEGLYHSLI FMAFSEKKY LWGTFVGGW LPAVFVAVV SVRATLANTG CWDLSSGNKK WIIQVPIAS IVLNFILFIN IVRVLATKLR ETNAGRCDDR QQYRKLKST LVLMPFLGVH YIVFNATPYT EVSGTLWQVQ MHEMLFNSF QGFFVAILYC FCNGEVQAEI KKSWSRWTLA LDFKRKARSG SSSSYSGPMV SHTSVTNVGP RVGLGLPLSP RLTPATATNG HPQLPGHAKP GTPALETLET TPPNMAAPKD DGFLNGSCSG LDEASGPER PPALIQEWE TVM </p> <p> agccacagaga cacattgggg ctgacctgcc gctgctgtca gtggaggcc agtgggtgctg A gccaagaagt gtcatggctg gtgtcgtgca cgtttccctg gctgtcact gcggggcctg tccgtggggc cggggcagac tccgcaaaag acgcgcagcc tgcaagtccg cggccacag acacattggg gctgacctgc cgtgctgtc agtggaggc cagtgtgtct gccaagaag tgtcatggct ggtgtgtgc acgtttccct gctgtctc ctctgtgc ctatggccc tgccatgcat tctgactgca tctcaagaa gagcaagcc atgtgccctg agaagatcca gaggccaat gagctgatgg gcttcaatga tctctcca gctgtctctg ggtgtggga caacatcacg tgttgaagc ccgccatgt ggtgagatg gtctgtgca gctgccctga gctcttccga atctcaacc cagaccaagt ctggagagcc gaaacattg gagagtctga tttgggtgac agtaactcct tagatctctc agacatggga gtgtgagcc gaaactgcac ggagatggc tgggtggaa ccttccctca ttactttgat ccctgtgggt ttgatgaata tgaatctgag actggggacc aggattatta ctacctgtca gtgaaggccc tctacacggt tggctacagc acatccctcg tcacccctac cactgccatg gtatctctt gtcgttccg gaagctgcac tgcaacgca acttcatcca catgaacctg ttgtgtctg tcatgtctgag </p>	Homo sapiens

231	3732	PACAP Receptor Type 1	NP_001109.1	<p>ggcgatctcc gcttctcatca aagactggat tctgtatgag gaggaggaca gcaaccactg cttcactcc actgtggaat gtaaggccgt catggttttc ttccactact gtgtgtgtgc caactacttc tggctgttca tggaggccct gtacctcttc actctgctgg tggagacctt cttccctgaa aggagatact tctactgga caccatcatt ggtgggggga ccccaactgt gtgtgtgaca gtgtgggcta cgctgagact ctactttgat gacacaggct cctgggatat gaatgacagc acagctctgt ggtgggtgat caaaggccct gtggttggct ctatcatggt taactttgtg ctttttattg gcattatcgt catccttctg cagaaacttc agtctccaga catggaggc aatgagtcca gcatctactt ggcactggcc cgggtccacc tgetgctcat cccactattc ggaatccact acacagtatt tgccttcc cagagaaatg tcagcaaaag ggaagactc gtgtttgagc tgggctggg ctccttccag ggttttggg tggctgttct ctactgttt ctgaatgggt aggtacaagc ggagatcaag cgaataatggc gaagctggaa ggtgaacctg tacttgcgtg tggacttcaa gcacgacac ccgtctctgg ccagcagtgg ggtgaatggg ggcacccagc tctccatcct gagcaagagc agtcccaaaa tccgcatgtc tggcctccct gctgacaatc tggccacctg agccatgctc ccct</p>	Homo sapiens
232	3844	Apelin Receptor	NM_005161	<p>atggaggaag gtggtgattt tgacaactac tatggggcag acaaccagtc tgaagtggag A tacacagact ggaatctctc gggggccctc atccctgcca tctacatgtt ggtattcctc ctgggcacca cgggaaacgg tctgtgtctc tggacctgtg ttcggagacag cccggagaaag aggcgctcag ctgatatcct cattgtctagc ctggcggtgg ctgacctgac cttcgtggtg acgtgcccc tgtgggctac ctacacgtac cgggactatg actggccctt tggaccttc ttctgcaagc tcagcagcta cctcatcttc gtcaacatgt acgccagcgt cttctgcctc accggcctca gcttcgaccg ctacctggcc atcgtgagc cagtggccaa tgcctggctg aggctggggg tcagcggggc cgtggccacg gcagttcttt ggtgtctggc cgcctcctg gccatgctg tcatgtgtt acgcaccac ggggacttgg agaaccacac taaggtgcag tgctacatg actactccat ggtggccact gtgagctcag agtggccctg ggaggtgggc cttggggtct cgtccaccac cgtgggcttt gtgtgacctt tcaccatcat gctgacctgt tactttctca tcgcccaaac catcgtggc cacttcgca aggaacgcat cgaggccctg cggaagcgc gccggctgct cagcatcctc gtgtgtctgg tggtagcctt tgcctgtgc tggatgccct accactgggt gaagacgtg tacatgtctg gcagcctgct gactggccc tgtgactttg acctctct catgaacatc ttcctact gcacctgcat cagctacgtc aacagctgcc tcaaccctt cctctatgcc tttctgacc cccgttccg ccaggcctgc acctccatgc tctgtgtgg ccagagcagg tgcgaggga cctccacag cagcagtggg gagaaatcag ccagctactc ttcggggcac agccaggggc ccggcccaaa catgggcaag</p>	Homo sapiens

233	3844	Apelin Receptor	NP_005152.1	ggtggagAAC agatgcacga gaaatccatc cctacagcc aggagaccct tctggttgac tag	Homo sapiens
234	3845	Chemokine- Like Receptor 1 (CMKLR1)	NM_004072	gaattcggca cgatcgagg aagcagcccc ggcggccagc agggagctca ggcagagaca A ggctccctgg gaagctcgg ggtgatagg ggtgtccagc tggcgcgctc tgggggttca gagggggatc ttgaatgaac aaatgaatga actgctttct gggcaaacag ccacagccag aggagccctgt gattggcaga aagaagccag ggtgtgcaag tctcccaac agctcgagt ggctgcagt cacagggaac cctcaggaag acctccggg cagagaccag agggaaagccc atctctccag cagaactgct tggatttttc taccaggagg ctacagggtc tgcaacaatg atagcagaag ctgatggcat cttagagatct agcttgggac tagcacagca tcaattctac cactttctgt tggtcacagc aactcaccat gccagtgcag attcaagggg aggagaaata gagtcacatt ctgtatggga ggcgtgacat agaattggag atgaagatta caacacttc atcagttacg gtgatgaata cctgattat ttagactcca ttgtggtttt ggaggactta tccccctgg aagccagggt gaccagatc ttcttggttg tggctctacag catcgtctgc ttcttcggga ttctgggcaa tggcttggtg atcatcattg ccacttcaa gatgaagaag acagtgaaca tggcttggtt cctcaacctg gcagtggcag attctctgtt caactctc ctcccaatcc atataccta tgcgcacctg gactaccat ggggttttcg gacagccatg tgcaagatca gcaacttctt tctatccac aacatgttca ccaggtctt cctgctgacc atcaccagct ctgacccgtg catctctgtg ctctccctg tctgttccca gaaccaccg agcgttcgcc tggcttacat ggcttgcag gtcatctggg tccctggctt ctcttgagt tccccatctc tctgttccg ggacacagcc aacctgcag tgaataatc ctgttcaac aacttcagcc tgtccacacc tgggtcttcc tctgggcca ctaactcca atggacct gtgggtgata gccggcacat ggtgtgact gtcaccgct tctctgtgg ctctctggtc ccagtctcta tcatcacagc ttgtacctc accatctgtt gcaactgca gcgcaaccg ctggccaaga ccaagaagcc ctcaagatt atttgacca tcatattac ctctctc tgtgtgtgcc cctaccacac actcaacctc cttagactcc accacatgc catgctggc tctgtcttca gcctgggttt gccctggcc actgccttg ccatggcca cagctgcatg aaccattc tgtatgttt catgggtcag gactcaaga agttcaaggt ggcctctc tctgcctgg tcaatgctct aagtgaagat acagccact ctctacc cagccataga agctttacca agatgtcatc aatgaatgag aggacttcta tgaatgagag ggagaccggc atgctttgat cctcactgtg gaacctca atgactctc tcaacctagg gacaccaag gatagtctt ctgaagatca aggaagaac ctcttagca tccaccaatt ttaactgcat tttgatggg atgaacagtg ttttatgctg ggaatctagg gcctggaacc ccttctct agtggacaga acatgctgtg ttcatacag ccttgacta gcaatttatg ctcttggga ggccagcctt gactgactca aagcaaaaaa ggaagaattc	Homo sapiens

235	3845	Chemokine- Like Receptor 1 (CMKLR1)	NP_004063.1	MEDEDYNTSI IIATFKMKKT MFTSVELLTI LHGKISCFNN IVCKLQNRNL ALAIANSCMN TSMNERETGM L	SYGDEYPDYL VNMVWFLNLA ISSDRICISVL FSLSTPGSSS WPTHSQMDPV VTIIITFFLC WCPYHTLNLL ELHHTAMPGS VFSLGLPLAT GHSSSYPHSRS FTKMSSMNER	PLEARVTRIF PIHIYAAMD YHWVFGTAMC KISNFLIHN IWNLAFFLSS PSLVFRDTAN TRELCGFLVP VLIITACYLT ELHHTAMPGS VFSLGLPLAT GHSSSYPHSRS FTKMSSMNER	LUVVYSIVCF LVVYSGTAMC YHWVFGTAMC KISNFLIHN IWNLAFFLSS PSLVFRDTAN TRELCGFLVP VLIITACYLT ELHHTAMPGS VFSLGLPLAT GHSSSYPHSRS FTKMSSMNER	Homo sapiens
236	3846	Sphingolipid Receptor Edg1	NM_001400	gtcgggggca cttcggccctg cacaaaaagc cgccctctag accatggggc gtcaactatg gacaaggaga atcctggaga atgtactatt gctaacctgc cgggaaggga attgagcgct ctcttctcgc atgggctgga aagcaactata ctgtactgca aacatttcca atcgtctcga gtgggctgca gctgtgctca cgggcttcca ttcaagcgac caccocaga tcttcttctc ccaccocagt caagccagag tagagttagt tatatatctt agctcctaaa tctttgtctg gtgtgcaact ttcatacccc ctggggttgt tggaagatg	gcagcaagat cttgagcgag cttgatcact cgctctctg ccaccagcgt atatcatcgt acagcattaa acatctttgt ttattggcaa tctgtctgg ggccaccacc gtatgtttgt atatcacaat taatcagcgc actgcatcag tctcttctg gaattactac aggtgaagac actcgggcac tccggtatcat ccatcatcgc aagacgaag agaactggaa gtttggaaaa ggagaatacg aatgcaactg agctttgatt ggccctcct gagatgtttt ctgtttctt agggatgcc tcttttactt atcatctata ggaggtgtaa	cgtacagat cgtcggttt catgaacca catcgagcc agggccacc aactacacg actgacctg cttgctgacc tctggccctc taccacacc ggccctgtca gtgtaaaatg ctgtgggtc tgcgctgtcc caccacggtc cttggtcagg cagctctgag cgctgtctg ctgtgacatc caaccctatc gtcctgtgc ttcagccgca gagaccatta gctgtccacc aatctctgg gcttgactg aacagcctg tggtgtcgg gaaggtgga ttgcaactg tgactgag ccttcaactt agtttcaaac agtttcaaac tgccccatg tgaagcgtc ccttcaactt tgtaactccc acacccacc ctacctgaga gttatcagag tattgtgagt acgtaggctg tctcgtgagg ccaagtctc	Homo sapiens	

237	3846	Sphingolipid NP_001391.2 Receptor Edg1	catgtaagcg ggatccggtt ttggaattt ggtgaagtc acttgattt ctttaaaaa catctttca atgaaatgtg ttaccatttc ataccatttc aagcgaagt ctgcataagg aagccactt tatctaaatg atattagcca ggtacctgg tgctctagga gaaacagaca agcaaaaca agtgaatacc gaatgatta acttttgcaa accaaggagg atctcttagc aaatgagtct acaaatatg acatcgctct ttccacttt tttgatgtt tattcagaa tcttggtga ttcatttcaa gcaacaacat gttgtatttt gttgtgtaa agtactttt cttgattttt gaatgtattt gtttcaggaa gaagtcattt tatggatttt tctaaccggt gttaactttt ctagaatcca cctcttctg cccttaagca ttacttaac tggtagggaa cgccagaact tttaagtcca gctattcatt agatagtaat tgaagatatg tataaatatt acaaagaata aaaatatatt actgtctctt tagtatggtt ttcaagtcaa ttaaacaggag agatgtcttg tttttttaa aagaatagta ttaaataggt ttctgacttt tgtggtatcat tttgacata gctttatcaa cttttaaaca ttaataaact gattttttta aag tctgacata gctttatcaa cttttaaaca ttaataaact gattttttta aag	Homo sapiens
238	3847	Sphingolipid NM_005226 Receptor Edg3	LENIFVLLTI WKTKFHRPM YFIGNLALS DLLAGVAYTA NLLSGATTY VFILCCFII P EGSMFVALSA SVFSLIAIAI ERYITMLMK LHNGSNFRL FLLISACWVI SLILGLPIM GWNCISALSS CSTVLPYHK HYILFCTVF TLLLSIVIL YCRIYSLVRT RSRRLTFRKN ISKASRSSEK SLALLKTVII VLSVFACWA PLFILLLLDV GCKVTCIDIL FRAEYFLVLA VLNSGTNPPII YTLTNKEMRR AFIRIMSCCK CPSGDSAGKF KRPIIAGMEF SRKSDNSSH PQKDEGNPE TIMSSGNVNS SS atggcaactg cctcccgcc gcgtctccag ccggtgcggg ggaacgagac cctgcgggag A cattaccagt acgtgggaa gttgcgggc aggtgaagg aggcctcga ggcagcacg ctcaccacg tgctctctt ggtcatctg agcttcactg tcttgagaa cctgatggtt ttgattgcca tctgaaaaa caataaatt cacaaccgca tgaactttt cctggcaac ctggctctt ggcactgct ggcgggcat gcttaacagg tcaacattct gatgtctggc aagaagacgt tcagctgtc tcccacggtc tggttctca gggaggcgag tatgtctgtg gcccctggg cgtccactg cagcttactg gccatgcga tcgagcgga cttgacaatg atcaaatga ggccttacga cgcaacaag aggcacgag tcttctctt gatcgggatg tgctggctca ttgcctcac gctggcgcc ctgcccattc tgggtggaa cgcctgcac aatctccctg actgctctac catcctgcc ctctactcca agaagtacat tgcctctgc atcagcatct tcacggccat cctggtgacc atcgtgatcc tctacgcag catctactc ctgggtgaagt ccagcagccg taagtgggc aaccacaaca actcggagcg gtccatggca ctgctcgga cgtggtgat tgggtgagc gtgttcacg cctgctggtc cccactctc atcctcttc tcattgatg ggcctgcagg gtgcaggcgt gcccatcct cttaaggct cagtgttca tegtgtggc tgtgtcaac tccgcatga accggtcat ctacagctg gccagcaag agatgcggc ggcctcttc cgtctggtt gcaactgcct ggtagggga cgggggccc ggcctcacc catccagcct ggcctgacc caagagaag taatcaagc agcagaaca atagcagca ctctcgaag gtcaagaaag acctgcccc cacagacccc tcatctgca tcatggaca gaaagcagca cticagaagt ggaattcttg caactga MATALPPRIQ PVRGNEFIRE HYQYVGKLAG RLKASEGST LTTVFLVIC SFIVLENLMV P LIAIWKNNKF HNRMYFFIGN LALCDLLAGI AYKVNIMSG KKTFSLSPTV WFLREGSMFV ALGASTCSLL AIAIERHITM IKMRPYDANK RHRVFLIIGM CWLIAFTLGA LPILGNCLH	Homo sapiens
239	3847	Sphingolipid NP_005217.1 Receptor Edg3		Homo sapiens

240	3848	C-C	NM_006641	NLPDCSTILP LYSKKYIAFC ISIFTAILVT IVILYARIYF LVKSSRRKVA NHNNSERSMA LLRTVVIVS VFIACWSPLF ILFLIDVACR VQACPILFKA QWFIVLAVLN SANNPVIYTL ASKENRRAFF RLVCNCLVRG RGARASPIQP ALDPSRSKSS SSNNSSHSKP VKEDLPHTDP SSCINDKNAA LQNGIFCN	Homo sapiens
		Chemokine Receptor 9		gcccctcacc ccaggcagag agcaacccag cctcttcccc agacactgag agctgggtggt A gcctgtctgc ccaggagagag ttgcatgcc ctcacaagc cctattccta acatggctga tgactatggc tctgaatcca catcttccat ggaagactac gtaacttca acttcaactga cttctactgt gagaaaaca atgtcaggca gttgcgagc cattctcc cacccttgta ctggctctgt ttcactgtgg gtgccttggg caacagtctt gttatccctg tctactggta ctgcacaaga gtgaagacca tgacogacat gttccttttg aatttggcaa ttctgaccc cctctttctt gtcactcttc ccttctggc cattgtctgt gctgaccagt ggaagtcca gaccttcag tgcaaggtgg tcaacagcat gtacaagatg aacttctaca gctgtgtgtt gctgatcatg tgcacagcg tggacaggta cattgccatt gccaggcca tgagagcaca tacttggagg gaaaaaggg tttgtacag caaatgggtt gctttacca tctgggtatt ggcagctgct cctgcatcc cagaaatctt atacagcca atcaaggagg aatccggcat tgctatctgc accatggttt accctagcga tgagagcacc aaactggaagt cagctgtctt gacctgaag gtcattctgg ggttcttctt cctctctgtg gtcattggct gctgctatac catcatcatt cacacctga tacaagccaa gaagtcttcc aagcacaag cctaaaaagt gacctcact gtccctgaccg tctttgtctt gtcagttt cctcacaact gcattttgtt ggtgagacc attgacgctt atgcatgtt catctccaac tgtgccgtt ccaccaact tgacatctgc ttcagggtca ccagaccat cgccttcttc cacagttgcc tgaacctgt tctctatgtt tttgtgggtg agagattccg ccgggatctc gtgaaaaacc tgaagaactt gggttgcatc agccaggccc agtgggtttc attacaagg agagaggaa gcttgaagct gtcgtctatg ttgtggaga caactcagg agcactctcc cctgagggg tcttctctga ggtgcatggt tcttttggaa gaaatgagaa atacagaaac agtttcccc ctagtgggac cagagagagt gaaagagaaa agaaaactca gaaagggatg aatctgaact atatgattac ttgtagtcag aatttgccaa agcaaatatt tcaaaatcaa ctgactagt caggaggctg ttgattggct cttagctgtg atgcccgcaa ttctcaagg aggactaagg accggcactg tgagaccac tggctttgccc actgccgga gcatcaatgc cgtgcctct ggaggagccc ttggattttc tccatgcact gtgaacttct gtggtttcag ttctcatgct gctcttcca aaaggggaca cagaagcact ggctgtgtct acagaccgca aaagcagaaa gtttcgtgaa aatgtccatc ttgggaaat tttctaccct gctcttgagc ctgataacc atgccaggtc ttatagattc ctgactaga acctttccag gcaatctcag acctaatctt cttctgttct ccttgttctg ttctgggcca gtgaaggctc ttgttctgat ttgaaaacga tctgcaggtc ttgccagta accctggac aactgaccac acccaagg catcaaaagt ctgttggctt ccaatccatt tctgtctct gctgagggtt ttaactaga caagattcc gcttattctt tggtatgggt acagtcttc tccatggcct gagcaggag attataacag ctgggttcgc aggagccag cttggccctg ttgtaggctt gttctgttga gtggacttg ctttgggtcc accgtctgtc tgcctccctag aaaaagggtt ggttcttttg gccctcttct tctgagggc cactttattc tgaggaatc agtgagcaga tatgggcagc agccaggtag ggcaaggggg tgaaggcgag gccttctgtg aaggtattt acttccatgc ttctctttt cttactctat	

241	3848	C-C Chemokine Receptor 9	NP_006632.2	MADDYGESEST SSMEDYVNFEN FTDFYCEKNN VRQFASHFLP PLYWLVFIVG ALGNSLVILV P YWYCTRVKTM TDMFLNLAI ADLFLVLTP FWALAAADQW KQTFMCKVW NSMYKMNFS CVLLIMCISV DRYIAIAQAM RAHTWREKRL LYKMWCFIT WVLAAALCIP EILYSQIKBE SGIAICTMWY PDESTKLKS AVTLKVLG FFLPFVVMAC TYTIIHILP QAKSSKHKA LKVTITVLTV FVLSQFPYNC ILLVQTIDAY AMFISNCAVS NNIDICFOVT QTAFFHSCL NPVLYFVGE RFRDLVRTL KNLGCSQQA WVSTRRRES LKLSMLLET TSGALS	Homo sapiens
242	3849	G Protein- Coupled Receptor GPR1	NM_005279	atggaagatt tggaggaac attatttgaa gaatttgaaa acctctcta tgacctagac A tattactctc tggagtctga tttagaggag aaagtccagc tgggagttgt tcactgggtc tccctgggtg tataattgtt ggttttgtt ctggaatc caggaatgc catcgtcatt tggttcaagg ggtcaagtg gaagaagaca gtcaccactc tgggttctc caactagacc attgctggatt tcattttct tctctttctg cccctgtaca tctcctatgt ggcctatgaat ttccactggc ccttggcat ctggtgtgct aaagccaatt cctcactgc ccagttgaac atgtttgcca gtgttttttt cctgacagt atcagcctgg accatatat ccaattgatc catcctgtct tatctcatcg gcatagaacc ctcaagaact ctctgattgt cattatatc atctggcttt tggttctctc aattggcgtt cctgcctctg actccggga cactgtggag ttcaataatc atactctttg ctataacaat ttccagaagc atgacctga cctcactttg atcaggcacc atgtctgtac ttgggtgaaa ttatcatgt gctatctctt ccttttgcta acaatgagta ttgtctact gtgtctcctc ttcaaggtga agaagcgaac agtctgac tccagtaggc attctggac aattctggtt gtggttggtg cctttgtgtt ttgctggact ccttatcacc tgtttagcat ttgggagctc accattcacc acaatagcta ttcccaccat gtgatgcagg ctggaatccc cctctccact ggtttggcat tctcaaatag ttgcttgaac cccctccttt atgtccta at tagtaagaag ttcaagctc gcttccggtc ctcaagtgtc gagatactca agtacacact gtgggaagtc agctgttctg gcacagtggag tgaacagctc aggaaactcag aaaccaagaa tctgtgtctc ctggaacaag ctcaataa	Homo sapiens
243	3849	G Protein- Coupled Receptor GPR1	NP_005270.1	MEDLEETLFE EFENYSYDL D YSLESLEE KVQLGVHVV SILVYCLAFV LGIPGNAIVI P WFTGLKWKKT VTTLWFLNLA IADFLFLFL PLYTSYVAMN FHWPFGIWLC KANSFTAQLN MFASVFFLTV ISLDHYIHLI HPVLSHRHT LKNSLIVIF IWLASLIGG PALYFRDTVE FNNHTLCYNN FQKHPDPLTL IRHVLTVWK FIIGYLFPLL TMSICYLCLI FKVKKRTVLI SSRHFWTILV VVAFFVVCWT PYHLFSIWEL TIHNSYSHH VMOAGIPLST GLAFLNSCLN PILYVLISKK FQARFRSSVA EILKYLWEV SCSTGVSEQL RNSETNLCI LETAQ	Homo sapiens
244	3850	G Protein- Coupled Receptor 10 (GPR10)	NM_004248	atggcctcat cgaccactcg gggccccagg gttctctgact tatcttctgg gctgcccgccg A gcggtcacaa ctcccgccaa ccagagcgca gaggcctcgg cgggcaacgg gtcggtgctc ggcgggagc ctccagccgt cagcccttc cagagcctgc agctgggtgca tcagctgaag gggctgacg tgctgctcta cagctcgtg gtgctcgtg ggtcgtggtg caactgcctg ctggtgtctg tgatgcgcg ggtgcgcccgt ctgcacaacg tgaagaaact cctcatcgcc aacctggcct tgcccgacgt gctcatgtgc accgctgctg tgcgctcac gctggcctat	Homo sapiens

245	3850	G Protein- Coupled Receptor 10 (GPR10)	NP_004239.1	gacctgagc cagcggtctg ggtgttcggc ggcggcctgt gccacctggt cttcttctctg cagccggta cagctctatgt gtccgtgttc acgtcacca ccatcgagc gtaccgctac gtcgtgttg tgcacctgt gagcggtgc atctcgtgc cctcagcgc ctacgctgtg ctggccatct ggcgctgtc gcggtgtctg gcgtgcccgc cgcgctgtca cactatcac gtggagctca agcgcacga cgtgcgcctc tgcgagagt tctggggtc ccaggagcgc cagcgcagc tctacgctg ggggtgtctg ctggtcacct acctgtccc tctgctgttc atctctctgt cttacgtccg ggtgtcagt aagctcgcga accgctggt gccgggtgc gtgacccaga gccaggcca cttggaccgc gtcgggcgc ggcgcacct ctgctgtctg gtggtgtgtg tgggtgtgt cgcgtctgc tggctgcgc tgcacgtctt caactgctg cgggacctg cccccacgc catgacct tacgctttg ggtggtgtga cgtgctctgc cactggctcg ccatgagttc ggcctgtac aaccttca tctacgctg gctgcaagac agctcccg aggagctgc caactgttg gtcgcttgg ccgcaagat agcccccat ggccagaata tgaccgtcag cgtggtcatc tga GLIVLLYSV VVGILVGNCL AVTPANQSA EASAGNSVA GADAPAVTTF QSLQLVHQLK P AFEPGRWFG GGLCHLVFFL QPVTVVSVF TLTIAVDY VLVHPLRRR ISRLSAYAV LAIWALSAYL ALPAAVHTYH VELPHDVR LCEEFGSQER QRQLYAWGLL LVTYLLPLLV ILLSYRVSV KLNRVPGC VTQSQADWDR ARRTTFCLL VVVVVFAVC WLPLHVENLL RDLDPHAIDP YAFGLVQLLC HWLAMSSACY NPFIYAWLHD SFRELRKLL VAWPRKIAPH GQNMIVSVVI	Homo sapiens
246	3851	G Protein- Coupled Receptor GPR12	NM_005288	atgaatgaag acctgaaggt caattaagc ggcgtgcctc gggattattt agatgcgct A gctcgggaga acatctcgc tgcgtctcc tcccggttc ctgcgctaga gccagagcct gagctcgtag tcaacccctg ggacattgtc ttgtgtacct cgggaacct catctcctgt gaaatgcca ttgtgtctct tatcatctc caaacccca gctgcgagc acctgttc ctgtaatag gcagctggc tcttcgacac ctgctggccg gcattggact catcaccaat tttgttttg cctacctgt tcaatcagaa gccaccaagc tggtaacgat cggctcatt gtcgcctctt tcttcgctc tgcgtcagc ttgctggcta tcactgttga ccgtacctc tcactgtact acgctctgac gtaccattcg gagaggacgg tcacgtttac ctatgtcatg ctcgtcatgc tctgggggac ctccatcgc ctgggctgc tgcgctgcac ggcgtggaac tgcctccgag acgagtcacac ctgcagcgtg gtcagaccgc tcaccaagaa caacgggcc atcctctcgg tctcctctct ctteatgttt gcgtcatgc ttcagctcta catccagatc tgtaagattg tgatgaggca cgcctcatcag atagcctgc agcaccatt cctggccaag tcgcactatg tgaccacccg gaaagggtc tccacctgg ctatcactt gggacgttt gctgttgtt ggtgccttt cacctctat tcttgtag taggattacac ctaccctcc atctatacct acgcacct cctgcccgc acctacaatt ccatcatcaa cctgtcata tatgcttca gaaaccaaga gatccagaaa gcgtctgtc tcatgtctg cggctgcac ccgtccagtc tcgccagag agcgctcg cccagtgat tgtag MNEDLKVNLS GLPRYLDAA AAENISAASV SRPAVEPEP ELVNPWDIV LCTSGTLISC P ENAVVLIIF HNPSLRPMF LLIGSLALAD ILAGIGLITN FVFAYLLQSE ATKLVITGLI VASFSASVCS LLAITVDRL SLIYALTYHS ERTVTFTYVM LVMLWGTSL LGLLPWGMW CLRDESTCSV VRPLTKNNAA ILSVSFLEMF ALMLQLYIQI CKIVNRHAHQ IALQHHFLAT	Homo sapiens
247	3851	G Protein- Coupled Receptor GPR12	NP_005279.1		Homo sapiens

248	3852	CX3C Chemokine Fractalkine Receptor 1	NM_001337	SHYVTRKGV STLAILGTF AACWMPFTLY SLIADYTPYS IYTYATLLPA TYNIIINEPVI YAFRNQEIQK ALCLICGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtgca cggcaggcct tcaccatgga tcagttccct A gaatcagtgga cagaaaactt tgagtagcat gatttggtcg agcctgtgta tattggggac atcgtgtgtc ttgggactgt gttcctgtcc atattctact cgtcatcttt tgccattggc ctggtgggaa attgttgggt agtgtttgcc ctcacaaaac gcaagaagcc caagagtgtc accgacattt accctctgaa cctggccttg tctgatctgc tgtttgtagc cactttgcc ttctggactc actatttgat aaatgaaaag ggcctccaca atgccatgtg caattcact accgctctct tcttcactgg ctttttttga agcatattct tcataccgt catcagcatt gataggtacc tggccatcgt cctggccgcc aactccatga acaacgggac cgtgcagcat gggtcacca tcagcctagg cgtctgggca gcagccattt tggtyggcagc acccagttc atgttcacaa agcagaaaaga aaatgaatgc ctgtgtgact acccgaggt ccttcaggaa atctggcccg tgcctcgcaa tgtggaaca aattttcttg gcttcctact cccctgctc attatgagtt attgtactt cagatcattc cagacgtgtg ttctctgcaa gaaccacaag aaagccaaag ccattaaact gatccttctg gtgtcactg tgttttctct ctctggaca ccctacaacg ttatgatttt cctggagacg cttaagctct atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtgtgactg agacggttg attagccat tgttgcctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggcgtcctg tgtgtgcctg cagtcacagt tgatttctc tcacttgaat cacaagaggag caggcatgga agtgttctga gcagcaattt tactaccac acgagtgtg gagatgcatt gctccttctc tgaagggaat ccaaaagct tgttctaca gagaacctgg agttctgaa cctgatgctg actagtggag aagatttttg ttgttattc ttacaggcac aaaaatgatg acccaatgca cacaacaaca cctagagtg ttgttgagaa ttgtgctcaa aattggaaga atgaacaaat tgaactcttt gaatgacaaa gtagagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gttaaatgag ggtgtgtaat attgttcata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaaagt aggggaacca gggcctgagc caagta MDQFPESVTE NFEYDDLAEA CYIGDIWFG TVFLSIFYSV IFALGLVGNL LVFPALNSK P KPKSVTDIYL LNLALSDLLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHVITIS LGWAAAILV AAPQFMETKQ KENECLGDYP EVLQEIWPVL RNVEINFLGF LLPLIMSYC YFRIQTLS CKNHKKAKAI KLILIVIVF FLFWTPYNVM IFLETIKLYD FFPSCDMRKD LRLALSVTET VAFSHCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSESQ RSRHGSVLSS NFTYHSDGD ALLLL atggaccagc aagaaacttc agtttatttg gattattact atgetcacgag ccaaaactct A gacatcaggg agaccactc ccatgttctt tacactctg tcttcttcc agtctttac acagctgtgt tctgactgg agtgcgtggg aacctgttct tcaaggagc gttgcatttc aaaccgggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atttttcttg tcacattgcc tctctgggtg gataaagaag catctctag actgtggagg acgggtctct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gactggag gtcctctctg tcacttgcat gagtgttgac cgctacttgc ccatgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgcagcat ctggtttac	Homo sapiens
249	3852	CX3C Chemokine Fractalkine Receptor 1	NP_001328.1	gtgtctgagc cctcaaaagt aggggaacca gggcctgagc caagta MDQFPESVTE NFEYDDLAEA CYIGDIWFG TVFLSIFYSV IFALGLVGNL LVFPALNSK P KPKSVTDIYL LNLALSDLLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHVITIS LGWAAAILV AAPQFMETKQ KENECLGDYP EVLQEIWPVL RNVEINFLGF LLPLIMSYC YFRIQTLS CKNHKKAKAI KLILIVIVF FLFWTPYNVM IFLETIKLYD FFPSCDMRKD LRLALSVTET VAFSHCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSESQ RSRHGSVLSS NFTYHSDGD ALLLL atggaccagc aagaaacttc agtttatttg gattattact atgetcacgag ccaaaactct A gacatcaggg agaccactc ccatgttctt tacactctg tcttcttcc agtctttac acagctgtgt tctgactgg agtgcgtggg aacctgttct tcaaggagc gttgcatttc aaaccgggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atttttcttg tcacattgcc tctctgggtg gataaagaag catctctag actgtggagg acgggtctct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gactggag gtcctctctg tcacttgcat gagtgttgac cgctacttgc ccatgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgcagcat ctggtttac	Homo sapiens
250	3853	G Protein- Coupled Receptor GPR15	NM_005290	gtgtctgagc cctcaaaagt aggggaacca gggcctgagc caagta MDQFPESVTE NFEYDDLAEA CYIGDIWFG TVFLSIFYSV IFALGLVGNL LVFPALNSK P KPKSVTDIYL LNLALSDLLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHVITIS LGWAAAILV AAPQFMETKQ KENECLGDYP EVLQEIWPVL RNVEINFLGF LLPLIMSYC YFRIQTLS CKNHKKAKAI KLILIVIVF FLFWTPYNVM IFLETIKLYD FFPSCDMRKD LRLALSVTET VAFSHCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSESQ RSRHGSVLSS NFTYHSDGD ALLLL atggaccagc aagaaacttc agtttatttg gattattact atgetcacgag ccaaaactct A gacatcaggg agaccactc ccatgttctt tacactctg tcttcttcc agtctttac acagctgtgt tctgactgg agtgcgtggg aacctgttct tcaaggagc gttgcatttc aaaccgggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atttttcttg tcacattgcc tctctgggtg gataaagaag catctctag actgtggagg acgggtctct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gactggag gtcctctctg tcacttgcat gagtgttgac cgctacttgc ccatgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgcagcat ctggtttac	Homo sapiens

251	3853	G Protein- Coupled Receptor GPR15	NP_005281.1	MDPEETSVYL KPGSRRLIDI VLLLTGMSVD PYCAEKKATP KIIFIVAAF IYYIFDSYIR	DYYATSPNS FIINLAASDF RYLAIWVPV IKLIWSLVAL LVSWLPENF RAIVHCLPC	DIRETHSHVP IFLVTPLMW SRKFRRTDCA IVTCYCCIIAR QEHYLPISAIL LKNYDFGSST	YTSVFLPVFY DKEASLGLWR YVVCASIWFI KLCIAHYQQSG QLGMEVSGPL LSTFIHAEDF	TAVELTGVLG TGSFLCKGSS SCLLGLPTLL KHNKKLKKSI AFANSCVNPF ARRKRSVSL	Homo sapiens
252	3854	G Protein- Coupled Receptor GPR18	NM_005292	gaaagagaca ctggaacta acactgttc agtgaagtgc agtatcatgc cccttttaac tatcttcata caagaagaga tataatgact gtactctgc tcttgccctt acttaaaaac cacgaccacc ctgcctcaag actgacattt tcataatctc aaggatcacc tttcgctttc caccttccctc acaaatttcag cagaaaaagt atgaataata cgtcaatgga ttatcttcat	aagcagcaat ctttttaag cagaaagagc ctgaaaaatg ctaccaacaa agctcacatc attggattat accacggtaa ttacccttcc cagattctctg acgtgcaaaag cctctgctac atttctgaca ttttcttga cttcacggga atcacgctgc ctgatgctgg atgaacctca gtctgagtca ttccgatctg aggttcttcc atttcaatcc ataactatca aaaaaaaaa	taaagtcagc caacaaaaga tattttaaca ctcatctctc gctgtaaaat cagatgaata tggttaacat ccatctatat gaatgtttta gagctctcac acagatacat ccgtgctggc tgctctataa tcactctatc ttcctttgtt ggactctaa ggtgcaggt gaacgggga gcacgtgctc ttagtgtcat gtagtctacg catcaaaat agtcaccttt aaaaaa	cccgaccac aatcacaaca aagatatcc ttgatggaca atcaatcaag gccttgtct tggttttca gcatagtg gatgaatggc ccaagcattg agcctgtga gtctggataa aagactcca aacgtgctga gggtgctact aaagtcagg gctgaaccc gctcgtctgc aatccttggg gagctgttac ctctactaca aattaccttc aatataaaca gtgaaatgtt cacttcaacta agtcaccttt ctcttgaaaa aataaatcca	Homo sapiens	

253	3854	G Protein- Coupled Receptor GPR18	NP_005283.1	MITLNNQDQ MMNVALVDLI MAIVQPKYAK LKAVNVNLT VLVCFMPFHI MLYRNYLRSM	VPFNSSHPDE FIMTLPFRME ELKNCTKAVL RLTFFFLIPL CFATFLMLGTG RKSRFSRSL	YKIAALVEYS YYAKDEWPFQ ACVGVWIMTL FIMIGCYLVI ENSNPFWGAF RSLSNINSEM	CIFIGLEVN EYFCQILGAL TTTPLLILLY IHNLLHGRYS TTFLMNLSTC L	ITALWVFSC TVFVPSIALW KDPKDDSTPA KLPKVKKEKS LDVILYYIVS KQFOARVISV	TKKRTVTIY P	Homo sapiens
254	3855	G Protein- Coupled Receptor GPR19	NM_006143	aattaagaga tttgattatt acctctgcca aacagacctt gattctgtgg taggaggact catcagcggt gggtagtga ctacgttctc caaggtgtcc ctttgtgacc ctctccctcc gattccatct aggcacagat aactatcaag tgtagctcag agctatcaca taatgccaat cogaagcaat catttcagaa tgacagagaa ttttgtctaa taaaaacaga tttgtaaaat	aaaaaagtga cctacacttc agccaatacc cactatgtgc ttgttttcta cagttctacca gccagcacgc acgtgcaagg ctctccatct agagaaaaag cctgtgctct tcttggaag gtcctcataa gcccgaacgg atgttctcca ctatggcacc tgatatcct tttcggagag gcctatacta atcccttcca gccaaggaaa gttctcattc agctatttac gcattcattt	atatggtttt tggtgcccc tgatggaatt tgaaacccgg tctctggcaa ccaactactt ctttgtcct ttgtgcgata gcatagaccg ccaagaaaat ttttctatgg gcactgccta ttttatttta tgaggaggac ttttaaactc cccatgaaca ttagttcttc ggatgaaga tcacaacaag tgcccataac aaaagcttgc tttcaattgt atattgttt gtttactgt	tgctcacaga cctctctct aagtgaggag ggaagtggcc tctctgggtt tggtgtctcc gtccagttc ttgtgcgata gttctacacc gattggcgga ctccaactgg cactgtcatc ccaaaaggtc aatgaacatt gttctcttgc agactataag agcctctaaa gacttttgc tccaaggatg tattaccaaa ttggccattc tatgacccag tcactcaact gtttactgt	atggataaca agctgcactg ctcactccag atcgtctatc tcgtggatc gacagtcatt cactctctgg ataaatata gtccctcgg tgcctctgc aaaagttccc cctactctgt atgtctctc gccaataaaa gactcgatct aactcaaatc agattataaa ttccaaggga aatgtttat	gcaagccaca A	Homo sapiens
255	3855	G Protein- Coupled Receptor GPR19	NP_006134.1	MYFAHRMDS KPEVATASI FVLLQFTTGR KRMIAASWIF LFYQKVIKYI HEQDYKKSSL TTSSRMANKN	KPHLIPTLL FFGILWLFSI WTLSATCKV DAGFVTPVLF WRIGTDGRTV VFTAITWISF YVGISEIPSM	VFLQNRSCTE FGNSIVCLVI VRYFYITPG FYGSNWDSC RTTMNIVPRT SSSASKPTLY AKTITKDSIY	TATPLPSOYL HRSRRQSTT VQIYVLLSIC NYFLPSSWEG KVTKIMFLI SIYNANFRRG DSFDREAKEK	MELSEHSMW NYFVVSMACT IDRFYITVYP TAYTVIHFIV LNLLFLLSWL MKETFCMSSM KLAWPINSNP	SNQTDLHYVL P	Homo sapiens
256	3856	G Protein- Coupled Receptor GPR2/CCR10	NM_016602	agagatgggg ggacgcatac cagccggggc tggcctggtc	acggagccca tcggctgagc ttccaaccca acctggcacc	cacagacagg cactgcggga gtgtctccct acctggcagc	ttcctggggc gctttgctac gacctgggct ccgacgcgca	cattactctg aaggcogag gcgtggggtc gcgcgcgcgc	gggatgaaga A	Homo sapiens

257	3856	G Protein- Coupled Receptor GPR2/CCR10	NP_057686.1	<p>ccacctgtctc cagctggccc tggcgcacct ctgtctggcc ctgactctgc ccttcgcggc</p> <p>agcaggggct ctteagggtt ggagtctggg aagtgcacc tgcgcacca tctctggct</p> <p>ctactcgcc tcttccacg cgggttctct cttectggcc tgtatcagcg cgcaccgcta</p> <p>cgtggccatc gcgcagagcg tcccagcgg gccgcggcc tccactcccg ccgcgcgaca</p> <p>cttggctccc gtcactgtgt ggctgtgtc actgtctctg gcgtgcctg cgtgtctctt</p> <p>cagccaggat gggcagcggg aaggccaag acgtgtctgc ctcactctcc cgaaggcct</p> <p>cacgcagacg gtgaaggggg cgaagccgtt ggcgcagggt gccctgggct tcgcgtctgc</p> <p>gctggcgctc atgttagcct gtaacgcgt tctggggcgc acgtgtctgg ccgcagggg</p> <p>ccccagcgc cggcgtgcgc tgcgctcgt ggtggctctg gtgcggcct tcgtgtgtct</p> <p>gcagctgccc tacagcctcg cctgtctgct gatactctgc gatctactgg ctcgcgcga</p> <p>gcggagctgc cctgcagca aacgcaagga tgcgcactg ctggtgacca gcgcttgcc</p> <p>cctgcggcg tgggctcca atccgttct ctacgcttc ctgggcctgc gcttcgcga</p> <p>ggacctgcgg aggtgtctac ggggtgggag ctgcacctca ggcctcaac ccgcgcgg</p> <p>ctgccccgc cggccccgc ttcttcctg ctacgtctcc acggagacc acgtctctc</p> <p>ctgggacaac taggctgcg aatctagagg agggggcagg ctgagggtcg tggaaaagg</p> <p>gagtagtgg gggaaactg agaaagagg agggacctaa agggactacc tctgtgcct</p> <p>gccacattaa attgataaca tggaaatgaa aaaaaaaa aaa</p> <p>1 MGTEATEQVS WGHYSDEED AYSAEPLFEL CYKADVQAFS RAFQSVSLT VAALGLAGNG P</p> <p>LVLAHLAAR RAARSTSAH LLQALADLL LALTFPFAA GALQWSLGS ATCRISGLY</p> <p>SASFHAGFLF LACISADRYV AIARALPAGP RPSTGFRAHL VSVIWMLLSL LLALPALLFS</p> <p>QDQREGQRR CRLIFPEGLT QTVKGASAVA QVALGFALPL GWMVACYALL GRTLLAARGP</p> <p>ERRRALRVV ALVAAFVLIQ LPYSLALLLD TADLLAARER SCPASKRKDV ALIVTSGLAL</p> <p>ARCGLNEVLY AFLGLRFRQD LRRLLRGSS PSGPQRRGC PRRRLSSCS APTETHSLSW</p> <p>DN</p>	Homo sapiens
258	3857	G Protein- Coupled Receptor GPR20	NM_005293	<p>atgcctctg tgtctccagc ggggcctctg gccggggcag tccccaatgc caccgcagtg A</p> <p>acaacagtgc ggaccaatgc cagcgggctg gaggtgccc tgtccacct gttgcccgg</p> <p>ctggacgag agctgcatg cacttccca ggcctgtgcy tggcgtgat ggcgtgacac</p> <p>ggagccatct tcttggcagg gctgtgtctc aacgggctgg cgtgtacgt ctctgtctgc</p> <p>cgacaccggg ccaagacacc ctacgtcatc tacaccatca acctgtgtgt gaccgatcta</p> <p>ctggtagggc tgtccctgcc caccgcttc gctgtgtact acggcgccag gggctgcctg</p> <p>cgctgtcct tcccgcact cctcggttac ttcctcaaca tgcactgtc cactctctc</p> <p>ctcacttga tctgcgtgga ccgtacctg gccatcgtgc ggcgcgaagc tcccgcggc</p> <p>tgcgcagc ctgctgtgct cagggcctg tgcgcttcg tgtgctggt gcgcgtggtc</p> <p>gtcacctgt cgggtgtggt cgtgacagg agcggccct gctgcgtgt ctgtgcgtg</p> <p>actgtctgt agttctctgt gccctgtctg gtcacagcg tgtttaccgg ccgcacatg</p> <p>tgtgactgt cgcggcggg tctgtccac cagggtgcgc aggcgcgt gcgggccaatg</p> <p>cagctctgc tcaagggtgt catcatctt ctgctgtgt tcaagcctt ccaagccgc</p> <p>caagtggcg tggcgtgtg gcccgacatg ccacaccaca cgaagcctct ggtctaccac</p> <p>gtggcgtga cctcagcag cctcaacagc tgcattgacc ccatgctcta ctgtctctc</p> <p>accagtggct tccagccac cgtccaggc ctcttcgggc agcacggaga cgttagccc</p> <p>agcagcgtg acgtgtctag catgcacagg agctccagg gctcaggcgg tcatcacatc</p>	Homo sapiens

259	3857	G Protein- Coupled Receptor GPR20	NP_005284.1	ctcagtgccg gccctcagc cctcaccag gccctggcta atggggccga ggcttag MPSVSPAGPS AGAVENATAT TTVRTNASGL EVPLHFLFAR LDEHLGTFP GLCVAMAVH P GAIFLAGLVL NGLALYVFC RTRAKTSPVI YTNILVITDL LVGLSLPTRF AVYVGARGCL RCAPFHVLGY FLNMCISILF LTCICVDRLY AIVRPEAPA CRQPACARAV CAFVWLAAGA VTLVLGVGTG SRPCCRVFAL TVLEFLPLL VIVFTGRIM CALSRPGLLH QGRQRRVRAM QLLLTVLIIF LVCFTPFHAR QVAVALWPDH PHHSLVTVH VAVTLSSLS CMDPIVYCFV TSGFQATVRG LFGQGEREP SSGDVVSMHR SSKSGRHHI LSAGPHALTQ ALANGPEA atgaaactcca ccttgatgg taatcagagc agccaccctt ttgcctctt ggcattggc A tatttggaaa ctgtcaattt ttgcctttg gaagtattga ttattgtctt tctaactgta ttgattattt ctggcaaatc cattgtgatt ttgtatttc actgtgcacc ttgttgggagc catcacacta caagtattt tatccagatt atggcatatt ctgacctttt ttgtggggtg agctgctgg tccctctctt atactctc catcacccc tccagtaga ggagtccttg acttgccaga tatttggttt ttagtatca gttctgaaga gctctccat gcttctctg gcctgtatca gcattgatag atacattgcc attactaac ctttaacctta taatactctg gttacacctt ggagactacg cctgtgtatt tctcgattt ggtctatact gacctgtgc ttctgcctt cctttttcca ctggggcaaa ctgtgtatt ttccctgtt ccatctgat gatgttat tgtgaggagt cctggcacac cgactcctac ttccacctg tcatctgat gatgttat gccccagcag ccttattgt ctgttcacc tattcaaca tctccgcac ctgccaacag cacacaaagg atatacaga aaggcaagc cgcttcagca gccagagtgg ggagactggg gaagtgcagg cctgtcctga taagcgctat gccatggctc gtttcgaat cactagtga ttttacatcc tctggttgc atatacatc tactcttgg tggaaagctc cactggccac agcaaccgct tgcctcctt ctgaccacc ttgcttggta ttagtaacag ttctgtcaac tgtgtaatt atagtctc caacagtga ttccaaagag gactaaagc cctctcagg gctatgtga cttcttggc aagtcagact acagccaag accttacac agttagaagc aaaggccctc ttaatggatg tcatatctga MNSTLDGNQS SHPFCLLAFG YLETVNFCLL EVLIIVFLTV LIISGNIIVI FVFHCAPLLN P HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLVEESL TCQIFGFVVS VLKSVSMASL ACISIDRYIA ITKPLTYNTL VTPWRLRLCI FLIWLYSTLV FLPSEFHGK PGYHGDVFWQ CAESWHTDSY FTLFTVMMLY APAALIVCFT YFNIFRICQO HTKDISERQA RFSSQSGETG EVQACPDKRY AMVLFRTSV FYILMLPYII YFLESSTGH SNRFASFLT WLAINSNFCN CVIYSLNSV FQGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgtttt cctccattct ggaatacaac atgcagctg aatctaacat tacagtgcga A gatgacattg atgacatcaa caccatattg taccacacc tatcatatcc gtttagctt caagtgtctc tcacggatt tcttatgta gaaattgtgt tgggacttgg cagcaacctc actgtattgg tactttactg catgaaatcc aacttaatac actctgtcag taacattatt acaatgaatc ttcatgtact tgatgaata atttgttgg gatgtattcc tctaactata gttatccttc tgccttcaact ggagagtaac actgtctca ttgctgtt ccatgaggct tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgctatcac ttgtgacaga tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tggcgagagc tgtaattgta atgatatcca ttggatttt ttctttttc tcttctctga ttcttttat tgaggtaaat	Homo sapiens
260	3858	G Protein- Coupled Receptor GPR21	NM_005294		Homo sapiens
261	3858	G Protein- Coupled Receptor GPR21	NP_005285.1		Homo sapiens
262	3859	G Protein- Coupled Receptor GPR22	NM_005295		Homo sapiens

263	3859	G Protein- Coupled Receptor GPR22	NP_005286.1	<p> tttttcagtc ttcaaaagtg aaataacctgg gaaaacaaga cactttttatg tgtcagttaca aatgaatact aactgaact gggaatgtat tatcacctgt tagtacagat cccaatattc ttttccactg tttagtaaat gttaatcaca tacaccaaaa tacttcagcg tcttaattt cgaataggca caagattttc aacagggcag aagaagaaag caagaaaaga aaagacaatt tctctaacca cacacatga ggctacagac atgtcacaaa gcagtgggtg gagaaatgta gtctttgtg taagaacttc agtttctgta ataattgcc tccggcgagc tgtgaacaga caccgtgaac gacgagaaag acaaaagaga gtcttcagga tgtctttatt gattattct acatttcttc tctgtggac accaatttct gtttaataa ccaccatttt atgtttaggc ccaagtgaac ttttagtaaa attaagattg tgtttttttt ctaggctta tggacaacct atatitcacc ctctattata tgcattcact agacaaaaat ttcaaaaggt ttgaaaaagt aaaaatgaaa agcgagttgt tctatagta gaagctgac cctgcctaa taatgctgta atacacaact cttggataga tcccaaaaga acaaaaaaaa ttacctttga agatagtga ataagagaaa aacgtttagt gcctcaggtt gtacagact ag </p>	Homo sapiens
264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297	<p> atgttgtgc ctccaagac agatggctca gggcaactcg gtagattca ccaggaaact A catggagaag gaaaaggga caagattagc aacagtgaag ggaggagaa tgggtggaga ggattccaga tgaacggtg gctgctggag gctgagcatg ccagcaggat gtcagttctc agagcaaaag ccattgtcaa cagccaacgc ttgctcttc tgtccccagg atcactctc cgacaggga gcatctccta catcaacatc atcatgcctt cggtgttcgg caccatctgc ctctgggca tcatcggga ctcacgggtc atctcggcg tctgaagaa gtccaaagctg cactggtgca acaagctccc cgacatcttc atcatcaacc tctcggtagt agatctctc ttctcctgg gcatgcccct catgatccac cagctcatgg gcaatggggt gtggcacttt ggggagacca tgtgaccct catcaggcc atggatgcca atagtcagtt caccagcacc tacatctga ccgcatggc cattgaccgc tactgggcca ctgtccacc catctctcc acgaagtcc ggaagccctc tgtggccacc ctggtgatct gcctcctgtg ggccctctcc ttcatcagca tcaccctgt gtgctgtat gccagactca tcccttccc aggaggtgca gtgggtgcy gcatacgctt gcccaccca gacatgacc tctactggtt caccctgtac cagtttttcc tggcctttgc cctgcctttt gtggtcatca cagcgcata cgtgaggatc ctgcagcga tgactctctc agtggccccc gcctccagc gcagatccg gctcgggaca aagagggtga cccgcacagc catgcccac tgtctggtct tctttgtgtg ctgggcacc tactatgtc tacagctgac ccagttgtcc atcagccgc cgacctcac ctttgtctac ttatacaatg cggccatcag cttgggctat gccaacagt gcctcaacc ctttgtgtac atcgtgctct gtgagacgtt ccgcaaacgc ttggtcctgt cggtagagcc tgcagcccag gggcagcttc gcgtgtcag caacgtcag acggtgacg aggagaggac gaaagcaaa </p>	Homo sapiens

269	3862	G Protein- Coupled Receptor GPR3	NP_005272.1	MMWAGSPLA WLSAGSGNVN VSSVGAEPG TGPAPLPSP KAWDVVLCS GTLVSCENAL P VVAIVGTPA FRAPMFLVNG SLAVADLLAG LGLVLHFAAV FCIGSAEMSL VLVGVLAMAF TASIGSLIAI TVDRYLSLYN ALTYSETTV TRTYVMALV WGGALGLGLL PVLAWNCLDG LITCGVVYPL SKNHLVVLAI AFFMVFGLM QLYAQICRIV CRHAQQIALQ RHLLPASHYV ATRKGATLA VLGAFAACW LPFTVYCLLG DAHSPLYTY LTLIPATYNS MINPIIYAFR NQDVQVIMA VCCSSSSKI PFRSRSPSDV	Homo sapiens
270	3863	G Protein- Coupled Receptor GPR31	NM_005299	atgccattcc caaactgctc agccccagc actgtgtgtg ccacagctgt ggtgtgtctg A ctggggctgg agtgtggct ggtgtgtgtg ggcaacgctg tggcgtgtgt gacctctctg ttccgggtca ggtgtggaa gccgtacgt gtctacctg tcaacctgc cctgctgac ctgtgtgtg ctgctgtctt gctttctctg gccgctctt acctgacct ccaggcttgg catctggcc gtgtgggtg ctgggacctg cgttctctg tggacctcag ccgaagctg gggatggct tctgtggc cgtgtgtgtg gccgtgtg tccgtgtgtt ccacctcgg cttaaggtca acctgtgtc tctcaggcg gccctgggg tctcgggct cgtctggctc ctgatgtct cctcactctg ccgggctgt ctcatctctg aggcggcca gaactccacc aggtgccaca gtttctact cagggcagac ggctcttca gctcatctg gcaggagca ctctctgctc ttcagttgt cctcccttt gccctcatcg tttctgcaa tgcaggcatc atcagggtc tccagaaaag actccgggag cctgagaaac agccaagct tcaggggcc caggcaactg tcaacttgtt ggtgtgtgtg tttgtctgt gctttctgct ctgctctctg gccagatcc tgatgcacat ctccagaat ctgggagct gcagggccct ttgtcagtg gtcctacct cggatgtcac gggcagctc acctacctg acagtgtct caacccctg gtatactgt tctcagccc cacttcagg agctctacc ggagggtctt ccacacctc cgaggcaaa ggcaggcagc agagcccca gatttcaacc ccagagactc ctattctga LLIAACLPFL AAFYLSLQAW HLGRVGCWAL RFLDLRSV GMAFLAAVAL DYLRVWHPR LKNLLSPQA ALGVSGLWVLM LMVALTCPGL LISEARQNST RCHSFYSRAD GSFIIWQEA LSCLQFVLFF GLIVFCNAGI IRALQRLRE PEKQPKLQRA QALVTLVVL FALCFPCFL ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHSVNPV VYCFSSPFR SSYRRVFHTL RKGQAAPPP DFNPRDSYS	Homo sapiens
272	3864	G Protein- Coupled Receptor	NM_005282	ctgggtgacct tacttatctc tgtgtcttcc tgggttctca ggaaatgccca gcactccac A ccacattgcc tgaacttccc aacactccct agctggctg tgtctctatct caacactcc tcatgtattt ctgtgtgtct ctagaacatt cccccgcat tattacttca atatggctac	Homo sapiens

GPR4

acataacttc taattgccct gaaaccatc tcttctcâc cattgccag cgatgcttc
 gtctctcca taaacactcc cggagaccacaa tttttgtgc accccatcac tccctcgttg
 acacactgac tccatacata acctccttga aaaacctctt tattaatctc acctcctcc
 agacttccct cctgtcataa ttccatccct ctccaacttt ttccctctca agctctgccc
 ttcccagccc agcccagcct acccaacctc atctctccc tgtagaccac atcccacat
 gtccctctga gctccaagg aagggtctca gggggcccca tggcctccc ctcctgtgg
 ccccaacagc cccgtgggccc aggggaagcg ccccaagac gaaagtgcac accatgggca
 accacacgtg ggagggtcgc cactggact cggcgctgga ccacctctt cgcgcaccc
 tctacatctt tgtcatcggc gtggggtgc ccaccaactg cctggctctg tggcgggcct
 accgcccagg gcaacagcgc aacgagctgg cgtctacat gatgaacctc agcatcgccg
 acctgctgta catctgcagc ctgcgcctgt ggtgacta ctctctgcac cagacaact
 ggatccacgg ccccggtcc tgaagctct tgggttcat ctctacacc aatatctaca
 tcaagcatgc ctctctgtgc tgcattctgg tggacgccta cctggctgtg gcccacccac
 tccgcttcgc ccgctgcgc cgcgtcaaga ccgcctggc cgtgagctcc gtggtctggg
 ccacggagct gggcgccaac tggcgccccc tgttccatga cgaactcttc cgaaccgct
 acaaacacac ctctctcttt gagaagtcc ccatggaagg ctgggtggcc tggatgaacc
 tctatcggtt gtctgtgggc ttcctctcc cgtggcgct catgctgctg tcgtaaccggg
 gcatcctgcg ggcgtgcgg ggcagcgtgt ccacgagcg ccaggagaag gccaaatca
 agcggttggc cctcagctc atcgccatcg tctgtgtctg ctttgccccc tateactgc
 tcttctgtc ccgcagcgc atctacctgg gcccccctg ggaactgcgc ttcgaggagc
 gcgtctttc tgcataccac agtcaactgg ctctccacc cctcaactgt gtggcggaac
 ccatactcta tgcctgtgc aacgagggcg cccgcagcga tgtggccaa gcccctgcaca
 acctgtccg ctttctggc agcgacaag cccagagat ggccaatgcc tgcctacccc
 tggagacccc actcacctc aagagaaca gcacagccaa agccatgact ggcagctggg
 cggccactcc gccctccag ggggaccagg tgcagctgaa gatctgccc ccagacaat
 gaaccccgag tggcacagaa tcccagttt tcccctctca tcccacagtc cctctctcc
 tggctctgtg tatgcaatt gtatgaaaa agggctgtgt taatatctat aagaatacaa
 gaacttagga agagtagggt tgggtgtca ctggtcaacc tttgtgctcc cagatcccat
 cacagtttgg cgatttgga gggcctcctg aaggaggaga tgagtaata tatttttg
 gagacagggt ctcaactgt tggccaggct ggaagtgcagt agtgcagtcg tggctcactg
 cagcctccac ctctgggct ctccagcgt ctccacat cagcctccc agtagctggg
 accacaaatg tgagccacc catgctggc taattttgt actttttga taaatggagt
 ctcaactgt tcccacggc tgatctgaa ctctgggct caagagatcc tctgctctg
 gctcccaaa gtgctcagat tagagatgt agccgcactg tctggccaga taaattaagt
 caaacatttg gtttccagaa aataaagaca aatagagaag gttagatttt ttttttcca
 acaagtggat aaagtctgt gactcgggg aaagtgaag gagaatgca gccgatatag
 agtcattatg ttgcaaaag cctgtgcat acaggccagg gaacataaga ccgcaattct
 aagtctctag ataaacagcg atctccaagt caagactgag gatgaagagg gagaatgtca
 gaactcaagt gaagggaat cagggcagac tgcctggagg agtgaigcca gaaggtttg
 gaagaagggt tgggacaaga agaaaggta tttattcatt cattcaacag aggtttatgt
 agggcacctg gctgggtggg gctgggggaca caacaatgac tgaggcagcc tggccttgcc

273	3864	G Protein- Coupled Receptor GPR4	NP_005273.1	ttcacaggc tcaccatca caagtaata aaaaatatgt aatgttggg attgct MGNHWEGCH VDSRVDHFLP PSLYIFVIGV GLPTNCLALW AAYRQVQRN ELGYILMNL P IADLLYICTL PLWDYFLHH DNWHPGSC KLFGEIFYN IYISIAFLCC ISVDRYLAVA HPLREARLR VKTAVAVSSV WATELGANS APLEHDELFR DRYNHTFCFE KFPMEGWAVW MNLRYVEVGF LFPWALMLLS YRGILRAVRG SVSTERQEKI KIKRLALSLL AIIVLCFAPY HVLILSRSAI YLGRPWDCGF EERFSAHYS SLAFTSLNCV ADPILYCLVN EGARSDVAKA LHNLRLFLAS DKPQEMANAS LTLEPLTSK RNSTAKAMTG SWAATPPSQG DQVQLKMLPP AQ	Homo sapiens
274	3866	G Protein- Coupled Receptor GPR6	NM_005284	atgaacgcga gcgcgcctc gctcaacgac tccaggtgg tggtagtggc ggcgaagga A gcgcgcgcg gcgcacagc agcaggggg gcgcacacg gcgaatggg acccctgct sapiens gcgcgcctc taggcgcg gcgcgcgct aatgggtctc tggagctgtc ctcgacgtg tcggctggc caccgggact cctgtgcca gcgtggaatc cgtgggacgt gctcctgtg gtgtcgggga cagtatgc tggagaaac gcctgtgtg tggcgctcat cgcgtccact ccgcgcctg gcacgccat gtctgtgtg taggcagcc tggccaccg tgacctgtg gcgggctgtg gctcatctt gcaattgtg ttcagtagt tgggtgccc ggaactgtg agtgctgca cgtgggctt cctgtggc tcttgcgc cctgtgtcag cagctgtg gccattacg tggacgcta cctgtccctg tataacgcgc tcacctatta ctcgcgcgg accctgttg gcgtgacct cctgttgc gccacttga cctgttccc aggcctggg ctgtgcccg tctgtggctg gaactgctg gcagagcgc ccgcctgcag cgtgtgcg ccgcgcgc gcagcacgt ggctctgtc tccgcgcct tcttcattgt ctcggcgc atgctgacc tgaactgctg catctgccag gtgtctgtg gccacgcga ccagatcgc ctgcagcgc actgcctggc gccaccccat ctgctgtgca ccagaaagg tgtgggtaca ctggctgtg tctgggcaac tttcggcgc agctggctg ccttgcacct ctattgcgtg gtgggcagc atgagaccc ggcggtctac acttacgcca ccctgtgtgc cgccacctac aactccatga tcaatcccat catctatgc ttcgcaacc agagatcca gcgcgcctg tggtcctgc tctgtgctg tttccagtc aaagtgcct tctgtccag gtcctccag gaggtctga	Homo sapiens
275	3866	G Protein- Coupled Receptor GPR6	NP_005275.1	SQVVVNAEG AAAATAAGG PDTGEWPPA AALGAGGGA NGSLSSQL P SAGPPGLLP AVNPWDVLLC VSGTVIAGEN ALVVALIAST PALRTPMFVL VGLATADLL AGCGLIHFV FQYLPSETV SLLTVGLVA SFAASVSSL AITVDYLSL YNALTYYSRR TLGLVHLLA ATWTVSLGLG LLPVLGNCL AERACSVVR PLARSHVALL SAAFWVFI MLHLYVRICQ VWRHAHQIA LQHQCLAPPH LAATRKGVGT LAVLGTFGA SWLPFAIYCV VGSHEDPAY TYATLLPATY NSMINPIYA FRNQEIQRAL WLLCCCFQS KVPFRSRSPS EV	Homo sapiens
276	3867	G Protein- Coupled Receptor GPR7	NM_005285	atggacaacg cctcgtctc ggagccctgg ccgcaccaag catcgggccc ggaccggcg A ctgagctgct ccaacgcgtc gactctggc ccgctgccc gcgcgtggc ggtgctgta ccagttgtct acgcggtgat ctgcgcctg ggtctggcg gcaactccg cgtgctgtac gtgtgtgctg gggcgcccc catgaagacc gtcaccaacc tggtcatct caacctggcc atcgccgacg agctcttcac gctgtgtgtg cccatcaaca tcgcgactt cctgtgtg cagtgccct tcggggagct catgtgcaag ctcatcgtg ctatcgacca gtacaacac	Homo sapiens

277	3867	G Protein- Coupled Receptor GPR7	NP_005276.1	MDNASEPWP PANASGPDPA LSCSNASTLA PLPAPLAVAV PVVYAVICAV GLAGNSAVLY P VLLRAPRMKT VTNLFILNLA IADELFTLVL PINIADFLLR QWPFGEIMCK LIVAIQYNT FSSLYFLTM SADRYILVWLA TAESRRVAGR TYSAARAVSL AVWGIVTLV LPFAVFARLD DEQRRQCVL VFQPEAFW RASRLYTLVL GFAPVSTIC VLYTLLCRL HAMRLDSHAK ALERAKKRV FLWAILAVC LLCWTPYHLS TWALTLDLP QTPIVIAISY FITSLTYANS CLNPELYAFL DASFRNLKQ LITCRAAA	Homo sapiens
278	3868	G Protein- Coupled Receptor GPR8	NM_005286	atgcaggcg ctgggaccc agagccctt gacagcagg gctccttct cctccccacg A atgggtgcc aagtcttca ggacaatgg actggccaca atgcacatt ctcgagagcca ctgcgttcc tctatgtc ctcgcccgc gtgtactcc ggtactcgg ggtactgtc tgtgggctg actggcaaca cggcgctcat ccttgaatc ctaaggcgc caagatgaa gacggtgacc aacgtgtta tctgaacct ggcgtgcc gacggctct caecgtgtt actgcccgtc aacatcgcg agcacctgt cagactactg ccttcgggg agtctctct caagctggtg ctggcgtcg accactaca catcttctc agcatctact tctagccgt gatagcgtg gaccgatac tgggtgtgt gccaccgtg aggtccgcc acatgccct ggcacacct cggggggcga aggtcgccag cctgtgtgtc tggctggcg tcaeggtcc gttctgcc ttcttctt tgcgtggcgt ctacagcaac gagctgcagg tccaagctg tggctgagc ttccgtggc cagagcgggt ctggttcaa ggcagcgtg tctacattt ggtcctggc ttcgtgtgc ccgtgtgcac catctgtgt cttacacag acctctgc caggctgcg gccgtggc tccgtcttg agccaaggct ctaggcaagg ccaggcgga ggtgaccgtc ctggctctcg tgcgtgtgc cgtgtgctc cctgtgtga cgccttcca cctggcctct gtcgtggccc tgaccacgga cctgcccag acccaactg tcatcagat gtcctacgtc atcaccagc tcaactacg caactcgtg ctgaacccct tctctacgc cttctatagat gacaaattcc ggaagaact ccgacgata ttgcgtgct ga MOAAGHEPL DSRGFSPLT MGANVSQDNG TGHNAFSEP LPFLYVLLPA VYSGICAVGL P TGNVAVILV LRAPMKTV NVFILNLA DGLFTVLVP NIAEHLQYW PFGEILCKLV LAVDHYNIES SIYFLAVMSV DRYLVLATV RSRHWPRTY RGAKVASLCV WLGVTVLVLP FFSFAGVSN ELQVPSGLS FFWPERWFK ASRVYTLVGL FVLPVCTICV LYTDLLRRLR AVRLRSKAK LGKARRKTV IVLVLAVCL LCWTPHLAS VVALTDLPQ TPLVISMYSV ITSITYANSC LNPFLYAFID DFRKNFRSI LRC	Homo sapiens
279	3868	G Protein- Coupled Receptor GPR8	NP_005277.1		Homo sapiens

280	3869	G Protein- Coupled Receptor HM74	NM_006018		Homo sapiens
				cgccactttg ctggagcatt cactaggcga ggcgtccat cggactcact agcgcactc A	
				atgaatcggc accatctgca ggatacattt ctggaatatg acaagaagaa ctgctgtgtg	
				ttccagatg acttcattgc caagtggttg ccgcgggtg tggcggtgga gtttatcttt	
				ggcctcttg gcaatggcct tgccctgtg atttctgtt tccacctcaa gttctggaaa	
				tccagccga tttctctgt caactggca gtagtgcact tctactgat catctgctg	
				ccgttcgtga tggactacta tgtcggcgt tcagactgga actttgggga catcccttg	
				cggctggtc tcttcattgt tggcatgaac cgcagggga gcatcatctt ctcacggtg	
				gtggcgtag acagtatctt ccgggtggtc catcccacc agccctgaa caagatctc	
				aattggacag cagccatcat ctctgcctt ctgtgggga tcaactgttg cctaacagtc	
				cacctcctga agaagaagt gctgatccag aatggccctg caaatgtgtg catcagcttc	
				agcatctgc ataccttcg gtggcacgaa gctatgttc tctggagt cctcctgcc	
				ctggcatca tctgttctg ctacgccaga attatctgga gccgcggca gagacaaatg	
				gaccggcatg ccaagatcaa gagagccatc acctcatca tgggtgtggc catgtcttt	
				gtcatctgt tcttcccg cgtgtgttg cggatccgca tctctggct cctgcacact	
				tcggcacgc agaattgtga agtaccgc tcggtggacc tggcgttctt tatcacttc	
				agcttcact acatgaacag catgtggac ccgtgtgtg actacttctc cagccatcc	
				tttcccaact tcttccac ttgatcaac cgtgcctcc agagaagat gacaggtgag	
				ccagataata accgagcac gagctcgag ctacagggg acccaacaa accagaggc	
				gtccagagg cgttaatgca caactccgt gagccatgga gccctctta tctgggcca	
				acctcaata accttccaa gaaggacat tgtaccaag aaccagcatc tctggagaaa	
				cagttgggt gttgatcga gtaatgtcac tggactcgc ctaagggttc ctggaacttc	
				cagattcaga gaactgatt taggaaact gtgcagatg agtgggagac tggttgcaag	
				gtgtgaccac aggaatcctg gaggaacaga gactaaagt tctaggcatc tgaacttgc	
				ttcatctctg acgtcgcag gactgaagt gggcaaatg taggcgttct tctgagcag	
				agttggagcc agatctctac ttgtgactg ttggccttct tccacatct gcctcagact	
				gggggggct cagctcctcg ggtgatctt agcctgctt tgcgtctag caggataaag	
				gagagctgag attggaggga attgtgtgc tctggagga agccaggca tcattaaca	
				agccagttag tcacctggct tccgtggacc aattcatctt tcagacaagc tttagagaaa	
				tggactcagg gaagagactc acatgcttg gtagtatct gtgttccg tgggtgtaat	
				aggggattag cccagaagg gactagcta aacagtgtta ttatgggaaa ggaatggca	
				ttgctgtt caaccagca ctaatgcaat ccattcctct ctgtttata gtaatctaag	
				ggttgagcag ttaaacggc ttcaggatag aaagctgtt cccactgtt tcgtttacc	
				attaagggg aaacgtgct ctgccacg gtagagggg gtgcagttc ctcctggttc	
				cttcgctgt gttctgtac ttacaaaaa tctaccactt caataaattt tgataggaga	
				caaaaaaaa a	
				281 3869 NP_006009.1 MNRHLLQDHF LEIDKNKCCV FRDDFAKVL PPVLGLEFIF GLLNGLALW IFCFLKSWK P	Homo sapiens
				SSRIELENLA VADFLILICL PFVMDYVRR SDWNFGDIPC RLVLRFAMN RQGSIFLTV	
				VAVDRYFRW HPHLANKIS NWTALISCL LWGITVGLTV HLLKKLLIQ NGPANVCISF	
				SICHTFRWHE AMFLLEFLP LGIILFCSAR IIVSLRQRM DRHAKIKRAI TFIWVAIVE	
				VICFLPSVV RIRIFWLHT SGTQNCVYR SVDLAFITL SFTYMNMLD PVVYFSSPS	
				PFNFSTLIN RCLQRMTGE PDNNRSTVE LTGDPNKTRG APEALMANSNG EPWSPSYLGP	

282	3870	G Protein-Coupled Receptor OGR1	NM_003485	TSNNHKKGH CHQEPASLEK QLGCCIE	atggggaaca tcaactgcaga caactcctcg atgagctgta ccatcgacca taccatccac A cagacgctgg ccccggtggt ctatgttacc gtgctggtgg tgggcttccc ggcacactgc ctgtccctct acttgcgcta cctgcagata aagcccgga acgagctggg cgtgtacctg tgcaacctga cgggtggcga cctcttctac atctgtctac tgccttctg cgtgcagtac gtgtgcagc acgacaactg gtctacggc gactgtctct gccaggtgtg cgcatectc ctgtacgaga acatctacat cagcgtgggc ttctctgtct gcatctcgt ggaccgtac ctggctgtgg cccatccctt ccgcttccac cagttccga cctgaaagg ggcgctcggc gtcagcgtgg tcatctggc caaggagctg ctgaccaga tctattctt gatgcacag gagtcactg aggcagaga ccagcacgc gtgtgctttg agcattacc catccaggca tggcagcgc ccataacata ctaccgttc ctggtgggt tctcttccc catctgctg ctgtgtggt cctaccagg cactctgcg ccgtgcgc ggagccagg caccagaag agccgaagg accagatcca gggctggtg ctacgaccc tggcatctt cctggcctgc ttctgcctt accactgtt gctgtggtg cgcagcgtct gggaggcag ctgcgactt gccaaaggcg ttttcaacg ctaccactt tccctctgc taccagctt caactgcgt gccgacccg tgcttactg ctctcactg gagaccacc accggacct ggcgcgctc cgcggggcct gctggcctt cctcacctgc tccaggaccg gccggccag ggagcctac ccgtgggtg ccccgagg ctcgggaaa agcggggccc aggtgagga gccgagctg ttgaccaag tccaccggc ctccagacc cctaactgc cagggtcggg cgggttcccc acgggcaggt tggcctag	Homo sapiens
283	3870	G Protein-Coupled Receptor OGR1	NP_003476.1	MGNITADNSS MSCITDHTIH QTLAPVYVT VLVGFPPANC LSLYFGYLQI KARNELGVYL P CNLTVADLFY ICSLFWLQY VLOHDNWSHG DLSQVCGL LYENIYISVG FLCISVDRI LAVAHPRFH QFRTLKAAG VSVIWKEL LSIYFLMHE EVIEDENQHR VCFEHIPIQA WQRAINYRF LVGLFPICL ILASYQGLR AVRRSHGTQK SRKDIQIRLV LSTVWIFLAC FLPYHVLLV RSVWEASCDF AKGVFNAYHF SLLITSFNCV ADPVLYCFVS ETTHRDRLRL RGACLAFLTC SRTGRAREAY PLGAPEASCK SGAQGEPEL LTKLHPAFQT PNSPGSGGFP TGRLA	Homo sapiens	
284	3921	Prostacyclin Receptor	NM_000960	agcaagtga ggcacagacg cagggacag gagcctcg gcaagactgg agagccaga A cctgggatgg cggattcgtg caggaaactc acctactgc ggggctcgtt gggcccgcc accagcacc tgatgtctgt ggcggtgtg gtggcaacg ggtcggccct gggcatcctg agcgcacgc gaccggcgcg cccctcgcc ttgcggtgc tggtaaccgg actggcgcc accgacctgc tgggcaccag ctctctgag cggcctgt tctgtggcta tgcgcgaac agctccctgc tggcctggc ccgaggggc cccgacctgt gcgatgcctt cgccttcgac atgaccttct tcggcctggc gtccatgctc atctctttt ccatggcctt ggagcgtgc ctggcgtga gccacccta cctctacgc cagctggagc gcccgcctg cgcgcgctg gcgctgccag ccatctacgc ctctcgtc ctctctgag cgtcggccct gctgggacctg ggccaacacc agcagtactg ccccgagc tgggtcttc tccgatgcg ctggggccag ccggggcggc cgccttctc gctggcctac gccggcctg tggcctgct ggtggtcgtg atcttctct gcaacggctc ggtcacctc agcctctgc gcatgtacc ccagcagaag cgccaccagg gctctctgg tccacggccg cgcaccggag agcagcaggt ggaccacctg	Homo sapiens	

285	3921	Prostacyclin NP_000951.1 Receptor	atcctgctgg cccatcatgac agtgggtcatg gccgtgtgct cccgtgctct caccatccgc tgcttcaccc aggtgtgctg cctgacagc agcagtgaga tggggagact ccttgccctc cgcttctacg cctcaaccc catctggac cctgtggctg tcatcctttt ccgcaaggct gtcttcacg gactcaagct ctgggtctgc tgcgtgtgct tggggtctgc ccacggagac tcgagacac cctttccca gctgcctcc gggagagagg acccaaggcc cccctctgct cctgtgggaa agagggggag ctgctgctt ttgtcgctt gggcgagggg gcaggtggag cccttgctc ccacacaga gtccagcggc agcgcctgg gacgtcgtc caaagcagaa gccagcgtg cctgtcctt ttcatgacat tcaagctga cctgtgac tctgctgtg cttcgggga caggagcag aaatcaggg acatggctga tggctgcgga tgcctggaac ttggccccc aactctggg ccgacagct gctgtttctc ctgctggcagg gcagctgctg ctgctctgg gaagagagt agggacagag gaaacgttta tctggagtg cagaaagaat ggtctctca aataaacag tggcctggc gacctgctt ggcctggat tcccatacca tctcatgtc taaatattta gaagcggag aagttccctc aggttctgt acagtccagt ctgctctgt ctgggtgctg gctccaatc gctccactt agggagccca atgcccacc ccaagtccc aggggatgg cctccctc taccagcca ctccaagac cagccccctt ctgctccac aaaaaccaca gttattgaa aagctccctg ccttccctg ccgctggctc cccaccagg ttggagccc tgcatccca aggggcaac gggaggaagg ggaggtgct gcattgtgg tgatgacgta ggacatgtg ttgtacaaa agggcctga gacattccac ct	Homosapiens
286	3923	Prostaglandin D2 Receptor	MDSCRNLTY VRGSGPATSLMFVGVVGLLGLARGGPA LCDFAFAMT FFLASMLIL FMAVERCLA LGTSFLSPA VFVAYARNSS LLGLARGGPA LCDFAFAMT FFLASMLIL FMAVERCLA LSHPYLAQL DGPRLAL PAIYAFVLF CALPLILGLQ HQQYCPGSGW FLNRWAPQG GAFLSLAYAG IVALIVAAIF LCNGSVTLSL CRMYRQQRH QGSLGPRPT GEDEVHLLIL LALMTVMVAV CSLPTIRCF TQVAPDSSS EMGDLLAFRE YAFNPILDPW VFILFRKAVF QRLKLWVCL CLGPAHGDSQ TPLSQLASGR RDRAPSA PV GKEGSCVPLS AWGEGQVEPL PPTQSSGSA VGTSSKAEAS VACSLC gctgtgcaac ctggcgcca tgcgcaacct ctatgcatg caccggcggc tgcagcgga A cccgctcc tgcacaggg actgtgcca gccgcgcgc gccggaggg aagcgtccc tcagccctg gagagctgg atcactcct gctgtggcg ctgatgacg tgccttcac tatgtgtct ctgcccgtaa ttatcgcg cctccagcc ctccagattc tatctgtgat gaaaaacagg acctctgaag aagcagaaga cctccagcc ctccagattc tatctgtgat ttcaattgt gaccttgga tttttatcat ttccagatc cagattttc gcatatttt tcacaagatt ttcattagac ctcttaggta caggagccg tgcagcaatt ccataacat ggaatccagt ctgtgacagt gtttttcat ctgtgtaga ctgaggaata tgcacatt tcagtcaag aacca MKSFFVRCON TTSVEKNSA VMGGVLFSTG LLGNLLALGL LARSGLGWS RRLRLPSV P FYMIVCGLTV TDLLGKLLS PVVLAAYAQN RSLRLVAPAL DNSLQAFAT FMSFFGLSST LQLLMALEC WLSLGHFFY RRHITRLGA LVAPVVSFAS LAFALPFMG FGKVFQYCPG TWCFIQVHE EGSLSVLGYS VLYSLMALL VLATVLCNLG AMRNLYAMHR RLQHPRSCT RDCAEPRADG REASQPLEE LDHLLLLAIM TVLFTMCSLP VIYRAYYGAF KDVKEKRTS EEAEDLRALR FLSVISIVDP WIFIFRSPV FRIFHKIFI RPLRYSRCS NSTNNESSL	Homosapiens
287	3923	Prostaglandin D2 Receptor	gctgtgcaac ctggcgcca tgcgcaacct ctatgcatg caccggcggc tgcagcgga A cccgctcc tgcacaggg actgtgcca gccgcgcgc gccggaggg aagcgtccc tcagccctg gagagctgg atcactcct gctgtggcg ctgatgacg tgccttcac tatgtgtct ctgcccgtaa ttatcgcg cctccagcc ctccagattc tatctgtgat gaaaaacagg acctctgaag aagcagaaga cctccagcc ctccagattc tatctgtgat ttcaattgt gaccttgga tttttatcat ttccagatc cagattttc gcatatttt tcacaagatt ttcattagac ctcttaggta caggagccg tgcagcaatt ccataacat ggaatccagt ctgtgacagt gtttttcat ctgtgtaga ctgaggaata tgcacatt tcagtcaag aacca MKSFFVRCON TTSVEKNSA VMGGVLFSTG LLGNLLALGL LARSGLGWS RRLRLPSV P FYMIVCGLTV TDLLGKLLS PVVLAAYAQN RSLRLVAPAL DNSLQAFAT FMSFFGLSST LQLLMALEC WLSLGHFFY RRHITRLGA LVAPVVSFAS LAFALPFMG FGKVFQYCPG TWCFIQVHE EGSLSVLGYS VLYSLMALL VLATVLCNLG AMRNLYAMHR RLQHPRSCT RDCAEPRADG REASQPLEE LDHLLLLAIM TVLFTMCSLP VIYRAYYGAF KDVKEKRTS EEAEDLRALR FLSVISIVDP WIFIFRSPV FRIFHKIFI RPLRYSRCS NSTNNESSL	Homosapiens

288	3924	Prostaglandin E Receptor EP1	NM_000955	ggggcgggca gggctgagcg gccggtgatg gggacccac atccaggca gtgccggcac A ccctggcgc tgacatgac ccttgcggc ccctcaacct gacgtggcg ggcgaggcga ccacatgcg ggcgccttg gtcccaaca cgtcgccgt gccgcgtg ggcgttcgc ccgcgtgcc catctctcc atgacgtgg gcgcgtgtc caactgtg gcgtggcgc tgtggcgca ggcgcgggc cgcctgcag ccgcgcgtc ggccaccac ttcgtgtg tcgtggccag cctgctggc accgacctg cgggccactg gaccgggc gcgtgggtg tgctctgta cactcgggg cgcgtcccg ccggcgggc ctgccactc ctggcggtt gcatggtct cttcgccctg tgcgccgtc tgcctggctg tggcatggc gtggagcgt gcgtggcgt caegcgccg ctgctccag ccgcggcgt ctggtgcgc cgcgcggc tggcctggc cgggtggcc gcggtggcc tggcctggc gctgtgcgc ctggcgcg tgggcgcta tgaagtgcag taccgggca cgtgtgtt catcgccct ggtcccccg gcggtggcg ccaggcactg cttgctggc tcttcgac cctcgccctg gtgcgtcc tcgcgcgt ggtgtgaac acgtcagc gcttggcc gcctggcc gcctggcgac gccgtccc accgctccc ccgctcag gcccgacg cgttcgct cgcctggc acggacccg ctcggctcc gccctgcg cctgtccat cgttcggc tccactct ttggcgctc tcggagcgc gctcggcac gcagagctg cgcacacg gtgagatgg tggccagct tgcgtgac atggtgtt cgtgcatctg ctggagccca atgtgtgt tggtggcgt ggcgtggc ggcgtgagct ctacctcc gcagcgcca ctgtctgg ccgtgcgct tgcctcgtg aaccagatc tggacctg ggtgtacat ctactggcc agcgtgtt gcgcaactg cttcgctct tgcgcctg ggcggagc agggcgcc ccgcgggct gggcctaaca ccgagcctt gggagggc ctgctgcgc agtcccg acagcgct cagccactc taagcaca cagagggcca acgactaag cagccacc tggtggcg ccagtgcc ggcgagc ctttggat aaaaagcct tctgcg MSPGPNLS LAGEATCAA PWNTSAP PSGASPALPI FMTLGAVSN LIALALLAQ P AGRLRRRSA TTFLLFASL LATDLAGHVI PGALVRLYT AGRAPAGGAC HFLGCMVFF GLCPILLGCG MAVERCVGT RPLHAARVS VARARLALA VAAVALAVAL LPLARVRYE LQYPTWCFI GLGPGGWRQ ALLAGLFASL GIVALLAALV NTLSGLALH RARWRRSR PPASGPDNR RRGAGHPRS ASASSASSIA SASTFFGSR SSGSARRARA HDVEMVQLV GIMVSCICW SPMLVLVALA VGMWSTSLQ RPLFLAVRLA SWNQILDWV YILLRQAVLR QLRLPPRA GAKGGPAGLG LTPSAWEASS LRSSRHSGLS HF	Homo sapiens
289	3924	Prostaglandin E Receptor EP1	NP_000946.1	ggggcgccgt cggcgcgctg ggtcgggaa ggggctctg gatttcggtc cttcccttt A ttcctctgag tctcggaacg ctccagctct cagacctct tctccccagg taaaggccg gagaggagg cgcattctt ttcaggcac ccacacatg gcaatgcct caatgactc cagctgagg actgcagac gcagcagtg cttcccccag gcgaagccc agccatcag tccgtcatg tctcgcccg ggtgtggg aacctatag cactggcgt gctggcgcg cgctggcgg gggacgtgg gtgcagcgc ggcgcagga gtcctctc cttgttccac gtgctggtga ccgagctgt gttcacgcac ctgctcgga cctgctcat cagccagtg gtactgctt cgtacgcgc gaaccagac ctggtggcag tggcgccga ggcgcgog tgcaactact tgccttcgc catgacttc ttacagcttg ccacatgct catgctctc gccatggcc tggagcgcta cctctgac gggacccct acttaccga gcgcgcgtc tcggcctccg ggggcctggc cgtgctgct gtcattatg cagtctcct gctctctgc	Homo sapiens
290	3925	Prostaglandin E Receptor EP2	NM_000956	ggggcgccgt cggcgcgctg ggtcgggaa ggggctctg gatttcggtc cttcccttt A ttcctctgag tctcggaacg ctccagctct cagacctct tctccccagg taaaggccg gagaggagg cgcattctt ttcaggcac ccacacatg gcaatgcct caatgactc cagctgagg actgcagac gcagcagtg cttcccccag gcgaagccc agccatcag tccgtcatg tctcgcccg ggtgtggg aacctatag cactggcgt gctggcgcg cgctggcgg gggacgtgg gtgcagcgc ggcgcagga gtcctctc cttgttccac gtgctggtga ccgagctgt gttcacgcac ctgctcgga cctgctcat cagccagtg gtactgctt cgtacgcgc gaaccagac ctggtggcag tggcgccga ggcgcgog tgcaactact tgccttcgc catgacttc ttacagcttg ccacatgct catgctctc gccatggcc tggagcgcta cctctgac gggacccct acttaccga gcgcgcgtc tcggcctccg ggggcctggc cgtgctgct gtcattatg cagtctcct gctctctgc	Homo sapiens

291	3925	Prostaglandin E Receptor EP2	NP_000947.1	1	<p> tgcgtgcgc tgcgtgacta tgggcagtag gtcagtagt gccccgggac ctggtgcttc atccggcacg ggcggaccgc ttacctgcag ctgtacgcga cctgctgctt gcttctcatt gtctcggtgc tgcctgcga cttcagtgct attotcaac tcatccgat gaccgcgga agccggagaa ggcgtgcgg accttccctg ggcagtgccc gggcgccgc cggggccgcg aggagagggg aaaggtgtc catggcggag gagacggacc acctcattct ctggctatc atgaccatca ccttcgcgt ctgctccctg ccttcacga ttttgcata tatgaatgaa acctcttccc gaaaggaaaa atgggacctc caagctctta gttttttatc aattaattca ataattgacc ctgggtctt tgccatcctt aggcctcctg ttctgagact aatgcgttca gtcctctgtt gtcggatttc attagaaca caagatgcaa cacaacctc ctgttctaca cagtgcagtg ccagtaaaaa ggtgcacctt tgagtgctag agtttaaaag ttcttagtta tatagcatct ggaagatcat ttgaaaattg ttccctggag aatgaaaaac agtgtgtaaa caaatgaag ctgcctaata aaaaggagt atcaaacat ttaagctgtg gtcaaggcta cagatgtgct gacaaggcac ttcagttaa ggtcagaag gagctacaaa acctaccctc aatgagcatg gtacttgcc ttggaggaa caatgggctg cattgaagat ccagctgcct attgatttaa gcttctcgt tgaatgacaa agtatgtggt ttgttaattt gttgaaacc ccaaacagtg actgtacttt ctattttaat ctgtctacta cgttatata catatagtgt acagccagac cagattaaac ttcatatgta atctctagga agtcaaatg tggagcaac caagcctgct gcttctgat cactagcga acctttatt tgaacaaatg agtgaacaa cataggcacc ttttactgtg atgttctgt atgtgggagt acctcatca ctacagtatt actcttaca gagtgactc agtgggttaa catcagtttt gttactcat cctccaggaa ctgcaggtca agtgtcagg ttatttatt tataatgtcc atagtcta atgtatcaag aagacttag gaatgttct ctcaacaaga aataataga atgtctcaag gcagttaatt ctcataata ctcttattat cctattctg ggggaggagt tacgtggcca tgtatgaagc caaatattag gcttaaaaac tgaacaaatc ggttcattct tcatatatac tgaacctt ttaaagttga tattggggcc atgataaaa tagattttat aagatgactg tttgtacca aaattcatct gtctatattt tatttagggg aacatgggtt gactcatctt atatgggaaa ccatgtagca gtgagtcata tcttaataa tttctaaaatg ttggcatgt aatgtaaac tcagcatcaa aatatttcag tgaatttga ctgtttaatc atagtactg tgaactca tctgaaatgt tacaaaaa aactataaa ca tctgaaatgt tacaaaaa aactataaa ca </p>	Homo sapiens
292	3926	Prostaglandin E Receptor EP3	L32662	A	<p> MGNASNDQS EDCETQWLP PGESPAISSV MFSAGVLGNL IALALLARW RGDVCSAGR P RSSLSLHVLT VELVTDLL GTCLISPVLT ASYARNQTLV ALAPESRAC YFAFAMTFFS LATMLMFAM ALERYLSIGH PYFYQRRVSA SGGLAVLPVI YAVSLFCSL PLLDYGYVQ YCPGTWCFIR HGRTAYIQLY ATLLLLIIVS VIACNFSVIL NLRMHRRSR RSRGSPSLGS GRGGPGARRR GERVSMAEET DHLILLAIMT ITFAVCSLPF TIFAYMNETS SRKEKWDLQA LRFLSINSII DPWFVAILRP PVLRLMRSLV CCRISLRTQD ATQTSCTQS DASKQADL atgagaaaaa gaagactcag agagcaagag gaattttggg gaaattaa </p>	Homo sapiens
293	3926	Prostaglandin E Receptor EP3	NM_000957	A	<p> accagaggtt tcccagagag gaaggcgtgg ctccctccc ggcagtagg cctcggcgcc A gccgcggccg cgggtccagc agcgagtag ggcggcggtt gcgccccgca ccatgggggg cagccagcc ccagcgcggg taaacgccga cctcgcgcgc gcgcgcgcgc gcgtctgcgc </p>	Homo sapiens

294	3926	Prostaglandin E2 Receptor EP3	NP_000948.1	ac	<p>cctcccgctg cggctctctg gacgccatcc cctcctcacc tcgaagccaa catgaaggag acccggggct acggagggga tgcccccttc tgcccccttc tcaaccactc ctacacaggc atgtgggcgc ccgagcggtc cgcgagggcg cggggcaacc tcaacgcgcc tccagggtct ggcaggattt gcgagtcggt gtcgctggcc ttcccgata ccatgctgct cactgggttc gtgggcaacg cactggccat gctgctctg tcgcgcagct accgggcgcg ggagagcaag cgcaagaagt ccttctctg gtgcacggc ttgctggcgc tcaccgacct ggtcgggcag cttctacca ccccggtcgt catgctcgtg tacctgtcca agcagcgttg ggagcacatc gaccgcggtg ggcgctctg cactttttc gggtgtgaca tgactgtttt cgggctctcc tcgtgttca tcgcagcgc catggccgtc gagcgggcgc tggccatcag ggcccgcaac tggtatgca gccacatgaa gacgctgcc accgcgctg tgcgtcctcg cgtgtggctg gccgtgctcg ccttcgacct gctgcggtg cggcggtg gccagtcac cgtccagtg cccggaagt ggtcctcat cagcaccgg caggggggca acgggactag ctcttcgcat aactgggga accttttct cgcctctgcc ttgctctcc tggggctctt ggcgctgaca gtcaccttt cctgcaacct ggccaccatt aaggccctg tgcctcgct cggggccaag gccacggcat ctcagtcag tgcacgtg ggccgcatc cgcagagac gccattcag cttatggga tcatgtcgt gctgtcggtc tgcgtgtct cgcctcgtat atgatgttg aaaatgatct tcaatcacac atcagttgag cactgcaaga cacacacgga gaacagaaaa gaatgcaact tcttctaat agctgttcgc ctggtctcac tgaaccagat ctgtatcct tgggttacc tgcgtttaa gaaatcctt ctccgaaagt ttgcccagat gaaaaaaga agactcagag agcaagat gggcctgat ggaaggtgt ttgtcatgc atggaggcag gtcccagga ctgtgtgcag tctcatgat agagaacct cgaagtcca gtaagctga tgactgaag ataatctgc ctaacctgg gatgaagtat ctgtgaact ttgacagc agatgaggaa tttggggaa attaaacct gccttctgc caggatcaca tcactggaag ctccatgact ctcttttct aagaagaaa aaatcacag aaacacccac ctccaaact attctctttt acttctccc ccaagccac ccccaaatat aactgttatc cagaagctgt tatgtcctgt ttccatcat gttttgtac ttctactata tctacatata tcaattaaac ttatgtccta ttgttttctg aatttatatt tgcgtatata ttatcatatg taaatttgc attttttat tgaataattat gttcttgag attatccac attgaaacat ggagctctaa atcggttaatt ttaacgccta tagagtattc cataattga ataaagcata attgtttgt ac</p>	Homo sapiens
295	3927	Prostaglandin E4 Receptor EP4	NM_000958	ac	<p>gagcagacc tcacactga acgctgtcct cccgacagc agaccggcg gcactgcaaa A gctgggactc gctcttgaag gaaaaaaat agcagtaag aaatcacga ccatcttca ctgacccatc ccgctgcacc tctgtttcc caagttttt aagctggca acttgacct cgggtgtccaa aaatgacag ccatgagac cggctttgag aagccgaaga tttggcagtt</p>	Homo sapiens

296	3927	Prostaglandin E Receptor EP4	NP_000949.1	<p> tccagactga gcagacaag gtgaaagcag gttagaggcg ggtccaggac atctgaggcg tgacctggg ggctgtgag gctgcacccg ctgtgcgcc tacagaccca gcttgcact ccaaggctgc gcacggccag ccactatcat gtcactccc ggggtcaatt cgtccgcctc cttagcccc gaccggctga acagccagt gaccatccc gcggtgatgt tcatcttcgg ggtggtgggc aacctggtag ccatcgtggt gctgtgcaag tcgcgcaagg agcagaagga gacgacctc tacagctgg tatgtgggt ggtgtgacc gacctgttg gcaatttgtt ggtgagccc gtgaccatcg ccacgtacat gaaggccaa tggcccgggg gccagccgct gtgcgagtac agcaccttca ttctctctt ctteagctg tccggcctca gcatcatctg cgccatgagt gtgagcgct acctggccat caaccatgcc tatttctaca gcaactacgt ggacaagcga ttggcgggccc tcacgtctt tgcagtctat gcgtccaacg tgcctttttg cgcgctggcc aacatgggtc tcggtagctc gcggtgcag taccagaca cctggtgctt catgactgg accaccaacg tgacggcgca cgcgcctac tctacatgt acgcggtt cagtccttc ctcatctcg ccacgtcct ctgcaacgtg cttgtgtgcg gcgcgctgct ccgcatgcac cgcagttca tgcgcgcac ctgctgggc accgagcagc accacgggc cgcggcgcgc tcggtgctt cccggggcca cccgctgcg tcccagcct tgcgcgct cagcacttt cggcgcgcgc ggagcttccg ccgcactgcg gcgcgcgaga tccagatggt catcttactc attgccacct cctggtggt gctcatctgc tccatccgc tcgtggtgcg agttatgctc aaccagttat atcagccaag ttggagcga gaagtcagta aaatccaga tttgcaggcc atccgaattg cttctgtgaa cccatccta gacccttga tatatacct cctgagaaag acagtgtca gtaagcaat agagaagatc aaatgcctct tctgccgcac tgccgggtcc cgcaggagc gctccggaca gactgctca gacagtcaca ggacatcttc tgccatgtca ggcacttc gctccttcat ctccgggga ctgaaggaga tcagcagtac atctcagacc ctctgcccag acctcact gccagacctc agtgaagaat gccttgagg caggaatttg cttccagggtg tgcctggcat ggccctggcc caggaagaca ccactcact gaggacttg cgaatatacag agacctcaga ctcttcacag ggtcaggact cagagatgt cttactggtg gatgagctg gtggagcgg caggctggg cctgccctta agggagactc cctgcaagtc acattccca gtgaacact gaactatca gaaaatgta tataataggc aaggaagaa atacagtact gttctggac cttataaaa tctgtgcaa tagacacata catgtcacat ttagctgtgc tcagaaggc tatcatca </p>	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	<p> LAVTDLLGTL LVSPVTIATY MKGQWPGQP LCEYSTFILL FFSLSGLSII CAMSVERYLA INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPNMGLGS SRLOYPDTWC FIDWTINVT HAAYSINYAG FSSFLILATV ICNVLVCGAL LRMHQFMRR TSLGTEQHHH AAAASVASRG HPAASPALPR LSDFRRRSF RRIAGAEIQM VILLIATSLV VLICSIPLV RVFVNQLYQP SLEREVSKNP DLQAIRIASV NPILDPIYI LLRKTVLASKA IEKIKLFCR IGSRRERSG QHCSDSQRTS SAMSGHSRSF ISRELKEISS TSQTLPLDLS LPDISENLG GRNLLPGVPG MGLAQEDTTS LRLRISETS DSSQGDSES VLLVDEAGGS GRAGPAPKGS SLQVTFPSET LNLSEKCI </p>	Homo sapiens

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298	3928	Prostaglandin F2- α Receptor	NP_000950.1	MSMNSKQLV SPAALLSNT TCQTEENRLSV FFSVIFEMTVG ILNSLSLALAI LMKAYQRFRQ P KSKASFLLLA SGLVITDFFG HLINGAIAVE VYASDKIEWIR FDOSNVLCSI FGICMVFSGL CPLLLGSVMA IERICGVTKP IFHSTKITSK HVRNMLSGVC LFAVFIALLP ILGHRDYKIQ ASRTWCFFYNT EDIKDWEDRF YLLIFSFGL LALGVSLLCN AITGITLLRV KFKSQHRRQG RSHHLEMIQ LLAIMCVSCI CWSPELVMTA NIGINGNHSI ETCETTLFAL RMATWNQILD PWYIILLRKA VLKNLYKLAS QCCGVHVISL HIWELSSIKN SLKVAISSES PVAEKSAST	Homo sapiens
299	4051	Proteinase-Activated Receptor 2	NM_005242	cgcccgccc tggggaggcg cgcagcagag gctccgattc gggcgaggcg agaggctgac A ttctctcgg tgcgtccagt ggagctctga gtttcgaatc ggtggcgggc gattccccgc gcgcggcgcg tcggggcttc caggaggatg cggagcggcga gcgcggcggtg gctgctgggg tcctctaaag gaagaagcct tattggttag gttgatgga catccacagt cactggaaaa ggagttacag ttgaacacag ctttctctg gatgagttt ctgcactctg cctcactgga aaactgacca cggctctctc tccaatgtc tacacaattg tgtttgtgtt ggttttgcca agtaacggca tggccctctg ggtctctctt ttcgaaacta agaagaagca ccttgctgtg attacatgg ccaatctggc ctggctgac ctctctctb tcatctggtt cccctgaag attgectatc acatacatgc caacaactgg atttatgggg aagctctttg taatgtgctt attggctttt tctatggcaa catgtactgt tccattctct tcatgacctg cctcagttg cagaggtatt gggctcatcg gaaccccatg gggcactcca ggaagaaggc aaacttgcc attggcatct ccttgccaat atggctgtg attctgtgg tcaccatccc ttigtatgct gtgaagcaga ccatctcat tccctgccctg aacatcacga cctgtcatga tgttttgctt gagcagctct tgggtggaga catgttcaat tacttctct ctctggccat tggggctctt ctgttccag ccttctcac agcctctgct tatgtgctga tgatcagaat gctgcgatc tctgcatgg atgaaaaactc agagaagaaa aggaagaggg ccatcaaat cattgtcact gtcctggcca tgtacctgat ctgcttcat cctagtaacc ttctgcttgt ggtgcattat tttctgatta agagccaggg ccagagccat gtcctatgcc tgtacattgt agccctctgc ctctctacc ttaacagctg catcgacccc ttgtctatt actttgtttc acatgatttc agggatcatg caaagaacgc tctccttgc cgaagtgtcc gcactgtaaa gcagatgcaa gtatccctca cctcaaaaga acactccagg aaatccagct ctactcttc aagttcaacc actgttaaga cctcctattg agtttccag gtcctcagat ggggaattgca cagtaggatg tggaaacctg ttaatgttat gaggacgtgt ctgttatttc ctaatcaaaa aggtctcacc acataccacc g	Homo sapiens
300	4051	Proteinase-Activated	NP_005233.2	MRSPSRAWLL GAAILLAASL SCSGTIQGTN RSSKGRSLIG KVDGTSHTVG KGVTVETVFS P VDEFSASVLT GKLTTVFLPI VYTIIVFVGL PSNGMALWVF LFRTKKKHPA VIYMANLALA	Homo sapiens

303	4090	G Protein- Coupled Receptor GPR17	NM_005291	KASLLILVIF TICFAPSNI I LIIHANYYY NNTDGLYFIY LIALCLGSLN SCLDPFLYFL MSKTRNHSTA YLTK	ccgacacca cggcgaggaga tcacctgctg cccgcagac cccgtgacct tcctcccgga A ccagcagcta gaggatgtcc aaacggagtt ggtgggctgg atccagaag cccccaagag agatgctgaa actctcaggc tctgactcca gcaaaagcat gaatggcctt gaagtggctc ccccaggtct gatcaccac ttctccctgg ccacggcaga gcaatgtggc caggagacgc cactggagaa catgctgttc gctcctctt accctctgga tttatctctg gcttagttg gcaataacct ggctctgtg cttttcatcc gagaccacaa gtcggggacc cggccaacg tgttctgat gcatctggcc ttggccgact tgtcgtgcgt gctggctcctg cccaccggc tggtctacca ctctctggg aaccactggc catttggga aatcgatgc cgtctaccg gcttctctt ctacctcaac atgtacgcca gcatactt cctcacctgc atcagcgccg accgttctt ggccatttg caccgggtca agtccctcaa gtcggcagg cccctctacg cacacctggc ctgtgcttc ctgtgggtg tggtggctgt ggccatggcc ccgctgctgg tgagccaca gaccgtgcag accaaccaca cgttggtctg cctcagctg tacgggaga aggctccca ccatgcccctg gtgtccctgg cagtggcctt caccttccc ttcatcaca cgttcacctg ctacctgtg atcatccgca gcttgcgga gggcctgcgt ttggagaagc gcctcaagac caaggcagtg cgcagtatgc ccatagtgtt ggccatcttc ctggtctgct tcgtgcccta ccacgtcaac cgtccgtct acgtgctga ctaccgacg catggggcct cctggccac ccagcgcatc ctggccctgg caaacgcgat cacctcctgc ctaccagcc tcaacggggc actcgacccc atcatgtatt tcttctgtgc tgagaagttc cgcacgccc tgtgcaactt gctctgtgg aagggtca aaggccctca agggcccgcc cccagcttc gaaggaaaa ccaacgagag ctctgtagt gccaaagtca agctgtgagc gggggggcgc gccagggccg agcgcagact gtttaggact cagcagaccc agcaagagc atctgcctt tcccagcca cctcccagc agcaacctg aaatctcagc agatgccac catttctcta gatcgcttag tctcaacca taaaaggaa gaactgacaa aggggatcca tcggccacc ctctgcaggg gcttgtgat gctacaatg ctctagaca ctcaagact tcactgttg caggagaga ggaggccgga agacaacc ctgaacaatg gaggccttc ttcccgcta ggctccagc ctccttccc ctacagaatc gctcctggc gaggctcagc agaaagacc tgaaggcagg ctgcaaatga cccagaag ggaactggga gtcctgtgtg ggaaggggag ggaagtcaa tactccttg cagcgcaag tactctagt cccctctga gtgcctctgc cagacacaca ctgacctagt tgaagagaca caggccacac atttcaggct ggttgccagc ggaactcagc actcacggc tgcgggact cagcacagct ctgattctg gatctctct ccagtcctg cacgcacaag cctgcaacc ccagagctct ttgacaggct cccagggcctc cctgctgg acaagcatgt gcagtcacgg gactcagct caggccagg ctgggctgtg cactgctc ccactgacc agaccactt cctccagaga ggcctctc cgcctgagct atttccctg ctagtgtga gatatttccc taacatgtcc tttttgtat ttgtttgtac ggaccataaa tataactga gctttaagc taaaaaaa	Homo sapiens
304	4090	G Protein- Coupled Receptor GPR17	NP_005282.1	MSKRSWAGS RKPPEMLKL SGDSQSQMN LFAFYLLDF ILALVGNLTA LWFIRDHKS GTPANVFLMH LAVADLSCVL VLPRLVYHF SGNHWPFGEI ACRLTGFLFY LNMYSIYFL TCISADRFLLA IVHPVKSLLK RRLYAHLLAC AFLWVVVAVA MAPLLVSPQT VQTNHTVVCL QLYREKASHH ALVSLAVAFI PFTTITVTCY	GLEVAPPGLI TNFSLATAEQ CGQETPLENM P GTPANVFLMH LAVADLSCVL VLPRLVYHF TCISADRFLLA IVHPVKSLLK RRLYAHLLAC QLYREKASHH ALVSLAVAFI PFTTITVTCY	Homo sapiens

305	4254	Rhodopsin	NM_000539	LSAKSEL	LLIIRSLRQG LRVEKRLKTK AVRMAIAVLVA IFLVCFVPYH VNRSVYVLHY RSHGASCATQ RILALANRIT SCLTSLNGAL DPIMYFFVAE KFRHALCNLL CGKRLKPPPP SFEGKTNNESS	Homo sapiens
					agagtcaccc agctggagcc ctgagtggtcct gagctcagcc ctctgcagca ttcttgggtg A ggagcagcca cgggtcagcc acaggggcca cagccatgaa tggcacagaa ggccttaact tctactgtcc ctctccaat ggcagcgggtg tggctacgcag ccccttcgag taaccacagt actacctggc tgagccatgg cagttctcca tgcctggcgc ctacatgttt ctgtgatcg tgctgggctt ccccatcaac ttctcagc tctacgtcac cgtccagcac aagaagctgc gcacgcctct caactacatc ctgtccaacc tagccgtggc tgacctcttc atggtccctag tggtcttcac cagcaccttc tacaccttc tgcattgata ctctgtcttc ggcccacag gatgcaattt ggagggttc ttgcccacc ttggcgggtga aattgccttg tggctccttg tggtcctggc catcgagcgg tacgtgggtg tgtgtaagcc catgagcaac ttccgcttcg gggagaacca tgccatcatg ggctgtgctt tcacctgggt catggcgtg gctgcgcg caccccact cgcgggtgg tccaggtaca tcccagagtc cctgcagtc tctgttgga tcgactacta cagctcaag cggaggtca acaacagtc tttgtctac tacatgttcg tggtccactt caccatccc atgattatca tcttttctg ctatgggcag ctgtcttca ccgtcaagga ggccgtgcc cagcagcagg agtcagccac cacacagaag gcagagaagg aggtcacccg catgtctatc atcatggtca tgcctttctt gatctgctgg gtgccttacg ccagcgtggc attctacatc ttaccacc caggctccaa ctctggtccc atctcatga ccatcccagc gttcttggc aagagcgcg ccatatcaa cctgtctac tatcatga tgaacaagca gtcccgaaac tgcagtctca ccacctatg ctggggcaag aaccactgg gtgacgatga ggctctgt accgtgtcca agcggagac gagcaggtg gcccggtct aagacctgcc taggaactctg tggcgcacta taggcgtct ccatcccta cacttccc cagccacagc catcccaca ggagcagcgc ctgtgcagaa tgaacgaagt cacataggct ccttaatttt tttttttt ttaagaaata attaatgagg tctctcact accctggaca gcctgagaag ggacatccac caagacctac tgatctggag tcccacgttc cccaaggcca gcgggatgtg tgccctcct cctcccaact catctttcag gaacacgagg attcttgctt tctggaaaag tgcctcagct tagggataag tgtctagcac agaattggggc acacagtagg tgcttaataa atgctggatg gatgcaggaa ggaatggagg aatgaatggg aaggagaac atatctatcc tctcagacc tgcagcagc agcaactcat acttggtctaa tgatatggag cagttgtttt tccctccctg ggctcactt tctctccta taaaatggaa atccagatc cctgtcctg ccgacacgca gctactgaga agaccaaaag aggtgtgtgt gtgtctatgt gtgtgttca gcactttgta aatagcaaga agctgtacag attctagtta atgtgtgaa taacatcaat taatgtaact agttaattac tatgattatc acctctgat agtgaacatt ttgagattgg gcattcagat gatggggttt caccacaact tggggcaggt ttttaaaat tagctaggca tcaaggccag accaggctg ggggttgggc tgtaggcagg gacagtcaca ggaatgcagg atgcagtcac cagacctgaa aaacaacac tgggggaggg ggcgggtgaa ggccaagtcc ccaatgaggg tgagattggg cctggggtct caccctagt gtggggcccc aggtcccgtg cctcccctt ccaatgggc ctatggagc acaggccttt ctctcagcct ctggaagcca cctgtcttt tgctctagca cctgggtccc agcatctaga gcattgagcc tctagaagcc atgtccccc gccacattt aattaacagc tgaagtcctg atgtatcct	

306	4254	Rhodopsin	NP_000530.1	<p> MNGTEGPNFY VPFSNATGVV RSPFEYPQYY LAERWQFSML AAYMFLLLVL GPFINFLTYL P VTVQHKKLRT PLNYLLNL AADLFMLVGG FTSFLYTSLSH GYFVFGPTGC NLEGFEEATLG GEIALWSLVV LAIERVAVVC KPMNSNFRGE NHAIMGVAFT WMALACAAP FLAGWSRYIP EGLQSCGID YYTLKPEVNN ESFVIYMFV HFTIPMIIF FCYGLVFTV KEAAAQQQES ATTQKAEKV TRMVIIMVIA FLICWVPYAS VAFYIFTHQG SNFGPIFMTI PAFFAKSAAL YNPVIYIMN KQFRNCMLTT ICCGNPLGD DEASATVSKT ETSQVAPA agagacagct gggccactgg cagtgagggg gagtgaggat ggacagagcc agtgcctcgc A ccactggctt cggggagctc gagtgcttgg ctgtggggat ggtgctactg gtggaagctc tctcgggtct cagctcaat acctgacca tcttctctt ctgcaagacc cgggagctgc ggactccctg ccactactg gtgtgagct tggctcttgc ggcagtgagg atcagcctga atgcccctgt tgcagccaca tccagccttc tccggcgtgc gccctacggc tcggagcgtt gccaggctca cggcttcagg ggttttgtga cagcgttggc cagcactgc agcagctcag ccatggcatg gggcggttat caccactact gcacccgtag ccagctggcc tggaaactcag ccgtctctct ggtgctcttc gtgtggctgt ctctgcctt ctgggcagct ctgccccttc tgggttgggg tcactatgac tatgagccac tggggacatg ctgcaccctg gactactcca agggggacag aaacttcacc agcttctctt tcaccatgtc ctcttcaac ttcgcatgc ccctcttcat cagcatcact tctacagtc tcatggagca gaaactgggg aagagtggcc atctccaggt aaacaccact ctgccagcaa ggacgtgctg gctcggctgg gcccctatg ccatcctgta tctatacgca gtcatcgag aactgacttc catctcccc aaactgcaga tgggtcccgc cctcattgcc aaaaatgggtgc ccacgatcaa tgcacatcaac tatccctgg gcaatgagat ggtctgcagg ggaatctggc agtgcctctc accgcagaag agggagaaag accgaaccaa gtgagcctgc caccctggag tgagccccag gccaggaggc tgttccagg gtcctgcccga gcagcctcg tggccaagcc cagacactca cccacttcc cagtggccc cgtgatacct ggtcctaggc tggacacagg attcagaaa acaccaggct gcacagaaag agccagatgg acctgagtgt cggtcacagc cccctacact caaggctgag aggcctcagg aaagtcatc ctttttaaaa ataataata atgtaagggg gtacagtga gttttgttac atggtatgat tgcctagtg tgaagtctgg gcttttagt taaccatcac cctaataata tacgttgtac ccattaagtt atttctatc cctcaccctc tccaccttg tcaccttct gagtcacca tgtctattat tccacactcc atgtccactg gtacacatta tttagctccc acttacaagt gagaacatgt ggtatttgac ttta MAETSALPTG FGELEVLAVG MVLIVLALSG LSLNTITIFS FCKTPELRTP CHLLVLSLAL P ADSGISLINAL VAATSSLLRR WPHYSDGCCQA HGFGQFVTAL ASICSSAAIA WGRYHYCTR </p>	Homo sapiens
307	4284	Retinal G Protein-Coupled Receptor RPE	NM_002921	<p> agagacagct gggccactgg cagtgagggg gagtgaggat ggacagagcc agtgcctcgc A ccactggctt cggggagctc gagtgcttgg ctgtggggat ggtgctactg gtggaagctc tctcgggtct cagctcaat acctgacca tcttctctt ctgcaagacc cgggagctgc ggactccctg ccactactg gtgtgagct tggctcttgc ggcagtgagg atcagcctga atgcccctgt tgcagccaca tccagccttc tccggcgtgc gccctacggc tcggagcgtt gccaggctca cggcttcagg ggttttgtga cagcgttggc cagcactgc agcagctcag ccatggcatg gggcggttat caccactact gcacccgtag ccagctggcc tggaaactcag ccgtctctct ggtgctcttc gtgtggctgt ctctgcctt ctgggcagct ctgccccttc tgggttgggg tcactatgac tatgagccac tggggacatg ctgcaccctg gactactcca agggggacag aaacttcacc agcttctctt tcaccatgtc ctcttcaac ttcgcatgc ccctcttcat cagcatcact tctacagtc tcatggagca gaaactgggg aagagtggcc atctccaggt aaacaccact ctgccagcaa ggacgtgctg gctcggctgg gcccctatg ccatcctgta tctatacgca gtcatcgag aactgacttc catctcccc aaactgcaga tgggtcccgc cctcattgcc aaaaatgggtgc ccacgatcaa tgcacatcaac tatccctgg gcaatgagat ggtctgcagg ggaatctggc agtgcctctc accgcagaag agggagaaag accgaaccaa gtgagcctgc caccctggag tgagccccag gccaggaggc tgttccagg gtcctgcccga gcagcctcg tggccaagcc cagacactca cccacttcc cagtggccc cgtgatacct ggtcctaggc tggacacagg attcagaaa acaccaggct gcacagaaag agccagatgg acctgagtgt cggtcacagc cccctacact caaggctgag aggcctcagg aaagtcatc ctttttaaaa ataataata atgtaagggg gtacagtga gttttgttac atggtatgat tgcctagtg tgaagtctgg gcttttagt taaccatcac cctaataata tacgttgtac ccattaagtt atttctatc cctcaccctc tccaccttg tcaccttct gagtcacca tgtctattat tccacactcc atgtccactg gtacacatta tttagctccc acttacaagt gagaacatgt ggtatttgac ttta MAETSALPTG FGELEVLAVG MVLIVLALSG LSLNTITIFS FCKTPELRTP CHLLVLSLAL P ADSGISLINAL VAATSSLLRR WPHYSDGCCQA HGFGQFVTAL ASICSSAAIA WGRYHYCTR </p>	Homo sapiens
308	4284	Retinal G Protein-	NP_002912.1	<p> agagacagct gggccactgg cagtgagggg gagtgaggat ggacagagcc agtgcctcgc A ccactggctt cggggagctc gagtgcttgg ctgtggggat ggtgctactg gtggaagctc tctcgggtct cagctcaat acctgacca tcttctctt ctgcaagacc cgggagctgc ggactccctg ccactactg gtgtgagct tggctcttgc ggcagtgagg atcagcctga atgcccctgt tgcagccaca tccagccttc tccggcgtgc gccctacggc tcggagcgtt gccaggctca cggcttcagg ggttttgtga cagcgttggc cagcactgc agcagctcag ccatggcatg gggcggttat caccactact gcacccgtag ccagctggcc tggaaactcag ccgtctctct ggtgctcttc gtgtggctgt ctctgcctt ctgggcagct ctgccccttc tgggttgggg tcactatgac tatgagccac tggggacatg ctgcaccctg gactactcca agggggacag aaacttcacc agcttctctt tcaccatgtc ctcttcaac ttcgcatgc ccctcttcat cagcatcact tctacagtc tcatggagca gaaactgggg aagagtggcc atctccaggt aaacaccact ctgccagcaa ggacgtgctg gctcggctgg gcccctatg ccatcctgta tctatacgca gtcatcgag aactgacttc catctcccc aaactgcaga tgggtcccgc cctcattgcc aaaaatgggtgc ccacgatcaa tgcacatcaac tatccctgg gcaatgagat ggtctgcagg ggaatctggc agtgcctctc accgcagaag agggagaaag accgaaccaa gtgagcctgc caccctggag tgagccccag gccaggaggc tgttccagg gtcctgcccga gcagcctcg tggccaagcc cagacactca cccacttcc cagtggccc cgtgatacct ggtcctaggc tggacacagg attcagaaa acaccaggct gcacagaaag agccagatgg acctgagtgt cggtcacagc cccctacact caaggctgag aggcctcagg aaagtcatc ctttttaaaa ataataata atgtaagggg gtacagtga gttttgttac atggtatgat tgcctagtg tgaagtctgg gcttttagt taaccatcac cctaataata tacgttgtac ccattaagtt atttctatc cctcaccctc tccaccttg tcaccttct gagtcacca tgtctattat tccacactcc atgtccactg gtacacatta tttagctccc acttacaagt gagaacatgt ggtatttgac ttta MAETSALPTG FGELEVLAVG MVLIVLALSG LSLNTITIFS FCKTPELRTP CHLLVLSLAL P ADSGISLINAL VAATSSLLRR WPHYSDGCCQA HGFGQFVTAL ASICSSAAIA WGRYHYCTR </p>	Homo sapiens

309	4321	Coupled Receptor RPE	NM_002980	<p>SQLAWSAVS LVLFWLSSA FWAALPLLGW GHYDYEPLGT CCTLDYSKGD RNFTSELFIM SFFNFAMPLF ITTTSYSIME QKLKSGHLQ VNTTLPARTL LLGWGPYAIL YLYAVIADVT SISPKLQMPV ALIAKMPVTI NAINYALGNE MVRGIIWQCL SPOKREKDRT K acgagggcgg cggagcccg ggaccctcg cggggcgctg agtcccag cgggcagagg A gcacgggcag gggagcgtcg gggcgccctc ggggaacgtg cgggcacat gcgtcccccac ctgtcgccgc cgtgcagca gctactactg ccggtgctgc tgcctcgcc cggcactcg actggagccc ttcccgcact atgtgacgtg ctacaagtgc tgggggaaga gcaagaccag tgcctgcagg aactctccag agacagaca caacataagc tgcctggccct ctctctgccc gggccggatg ggttgtagg gaatgtggga gaacataagc atctcccg atgtccaca gcagaaatgg ttcttggtc gtggaggtgg aatgcccgag attctccgg atgtccaca gcagaaatgg ttcttggtc cgaactgca cacaggatgg ctggtcagaa acctcccca ggcctaatct ggcctgtggc gttaatgtga acgactcttc caacagaaag cggcactcct acctgctgaa gctgaaagtc atgtacacgg tgggctacag ctctccctcg gtcattgctcc tggcgcctc tggcattcctc tgtgtcttc ggaggctcca ctgcactgc aactacatc aactacatc tgcctcttc ctccgtgctc ttcattcttc gtccctgc caactcatc aagacgcgc tgcctcttc ctccgtgctc gtcacctact gcgactccga caggcgccgc tgcaagctgg tcatgggtgc ttccagtagc tgcatcatgg ccaactactc ctggtgctg tggaagggc tctacctca cacactctc gccatctcct tcttctctga aagaaagtac ctccaggat ttgtggcatt cggatgggt tctccagcca ttttgggtc ttgtgggtc attgccagc acttcttga agatgttggg tgctgggaca tcaatgccaa cgcattccatc tgggtgatac ttctgtgctc tgtgattctc tccatctgca ttaattctat ccttttcata aactcttaa gaactctga gaaaaactt agaacccaag aaacaagagg aatgaagtc agcattata agcctctgc caggtccact ctctgtgta tcccctctt tggcattccac tacatgctc tgcctcttc cccagaggac gctatggaga tccagctgtt ttttgaacta gccctggct cattccagg actggtggtg gccgtctct actgcttct caatggggag gtgcagctgg aggtccagaa gaagtggcag caatggcacc tccgtgagtt cccactgcac cccgtggcct cttccagaa cagaccaag gccagccact tggagcagag ccaggcacc tgcaggacca gcatcatctg agagctgga gcaggtcac ccaggacag agaccaagag aggtctcg aggtctggc actgctggtg gacagccagt ctcccgaca gacacctgt gctctcttc agctgaagat gccctccc agccctgga ctctccgaa gggatgtgag gcatgtggg gcaggacaa ggcctgggat ttggttcgt tgcctctc ggaagagaa ttcagggggc ccagaaagg acagggaaat aaatggtgcc tggatgaga ttc</p>	Homo sapiens
310	4321	Secretin Receptor	NP_002971.1	<p>MRPHLSPPLQ QLLLPVILAC AAHSTGALPR LCDVLQVLWE EQDQCIQELS REQTDLGTE P QVPVCGEGMW DNISCWPSSV PGRMVEVECP RFLRLMITSRN GSLFRNCTQD GWSETFPRN LACGVNVNDS SNEKRHSYLL KKKMYTVGY SSSLVMLLVA LGILCAFRRL HCTRYIHM LFVSFILRAL SNFKDAVLF SSDDVTYCDP HRAGCKIWMV LFQYCIIMANY SWLIVEGLYL HTLLAISFFS ERKYLQGFVA FGWSPAIIV ALWAIARHFL EDVGCWDINA NASIWIIRG PVILSILINF ILFINILRIL MRKLRTQETR GNEVSHYKRL ARSTLLIPL FGIHYIVFAF SPEDAMEIQL FFELALGSFQ GLWAVLYCF LNGEVQLEVQ KKWQWHLRE FPLHPVASFS NSTKASHLEQ SQGTCRTSII</p>	Homo sapiens

311	4480	Somatostatin NM_001049 Receptor Type 1	atgttcccca atggcaccgc ctctctctct ctctctctct tctctctctc cccgggacag cccgggacag tgcgggaag gcggcgagc caggggcccc caggggcccc gggggcgag ctcggagag catggagag ccaggcgaa atgcgtccca gaacgggacc ttgagcgagc ggcaggagc ggcaggagc cgcacatctg atctctttca tctactcgt ggtgtgcctg ttggtgctg gtgggagc ttggtgagc ttggtgagc tacgtgaccc tgcgtatgc caagatgaag acggccacca acatctacat cctaaaatctg gccattgctg atgagctgct catgctcagc gtgcctctcc tagtcacctc caggttggtg cgccactggc cctcgggtgc gctgctctgc cgcctcgtgc ttagcgtgga gcgggtcaac atgttcacca gcattactg tctgactgtg ctcagcgtgc cccactacgt ggcgtggtg catcccatca agcgggcccc ctacgcggc cccactggtg ccaaggtagt aaacctgggc gtgtgggtgc tategtctg cgtcatcctg cccactggtg tctctctcgc caccgggc aacagcgagc gcaagggtgc ttgcaacatg ctcagtcagc agcccgctca acgtggctg gtgggcttcg tgtgtacac attctctcgc ggtctcctgc tgcctggtg ggtctatctg ctgtgctacg tgcctcatc tgcctacatg cgcctggtg cctcaaggc cgcctggcag cagcgcaagc gctcggagcg caagatcacc ttaatgggtg ttagtgggtg gatgtgtt gtcatctgct gtagccttt ctactggtg cagctggtg acgtgttg ttagcaggac gacgccagc ttagtcagct gtggtctc ctcggtcag ccaacagctg cgcacaccc atcctctatg gcttctctc agacaactc aagcgtctt tccaacgcat cctatgcctc agctggatgg acaacggcgc ggagagcgc gttgactatt acgccaccgc gctcaagagc cgtgcctaca gtgtggaaga cttccaacct gagaacctg agtcggcg cgtctccgt aatggcacct gcacgtccc gatacagcag cctgga atggcacct gcacgtccc gatacagcag cctgga	Homo sapiens
312	4480	Somatostatin NP_001040.1 Receptor Type 1	MEPNTASSP SSSPSPSGS CGEGGSRGP GAGAADGME PGRNASQNGT LSEGGGSAI P ISFIYVWCL VGLGNSMVI YVILRYAKMK TATNTYILNL AIADLLMLS VPFLVTSTLL RHWPFALLC RLVLSDAVN MFTSIYCLTV LSVDRYAVV HPIKARYRR PTVAKVNLG VWVLSLIVL PIVFSTAA NSDGTACNM LMPEPAQRWL VGFVLYTFLM GFLLPVGAIC LCYVLIAM RMVALKAGWQ QRKRSEKIT LMVMVMVMF VICWMPFYV QLVNVFAEQD DATVSQLSVI LGYANSCANP ILYGFLSDNF KRSFORILCL SWMDNAEEP VDIYATALKS RAYSVEDFQP ENLESGGVER NGTCTSRITT L atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac A ctcaatggct ctgtgtgtc aaccaacacc tcaaacccaga cagagccgta ctatgacctg acaagcaatg cagtcctac attcatctat ttgtggtct gcatcatgg ttgtgtggc aacacacttg tcatttatgt catctccgc tatgccaaga tgaagaccat caccacatt tacatcctca acctggccat cgcagatgag ctctcatgc tgggtctgccc ttcttggt atgcaggtgg ctctgttcca ctggcccttt ggcaaggcca ttgcccgggt ggtcatgact gtggatggca tcaatcagtt caccagcctc ttctgctga cagtcagtag catgaccca tacctggctg tgggtccacc catcaagtcg gccaaagtga ggagacccc gacggccaag atgateacca tgggtgtgtg gggagtctct ctgctgggtc tcttgccat catgatata gctgggctcc ggagcaacca gtgggggaga agcagctgca ccatcaactg gccaggtgaa tctgggctt ggtacacagg gttcatcctc tacacttca tctggggtt cctggtaacc ctcaccatca tctgtctttg ctactgttc attatctca aggtgaagtc cctggaatc cgagtgggct cctctaagag gaagaagtct gagaagaagg tcaccogaat ggtgtccatc gtgggtggctg tctcatctt ctgctggctt ccttctaca tatccaacgt ttctccgtc	Homo sapiens
313	4481	Somatostatin NM_001050 Receptor Type 2		Homo sapiens

314	4481	Somatostatin NP_001041.1 Receptor Type 2	<p> tccatggcca tcagcccccac ccagccctt aaagcatgt ttgactttgt ggtggctctc acctatgcta acagtgtgc caacctatc ctatatgctt tctgtctga caacttcaag aagacttcc agaattgctt ctgttggtc aagtgagcg gcacagatga tggggagcgg agtgcagta agcaggacaa atccggctg aatgagacca cggagacca gaggacctc ctcaatggag acctccaaac cagtattcga NTLVIVILR YARKMTITNI YILNLAIAD EFMGLPFLA MQVALVHPF GKAI CRVNT VDGINQFTSI FCLTVMSIDR YLAVVHPKS AKWRPRTAK MITMAVGVSL LVILPIMLY AGLRNQWGR SCLTNWPG E SAWYTGFI YFIFLGFLVP LTICLCYLF IIRKVKSSGI RVSSKRKKS EKKVTRMVS I VVAVFIFCWL PFYIFNVSS SMAISPTPAL KGMDFVVLV TYANSCANPI LYAFISDNFK KSFQNVLCIV KVSCTDDGER SDSKQDKSRL NETTETQRTL LNGDLQTSI </p>	Homo sapiens
315	4482	Somatostatin NM_001051 Receptor Type 3	<p> atggacatgc ttcatccatc atcgtgtcc agaacctcag aacctgagaa tgcctcctcg A gcctggcccc cagatgccac cctgggcaac gtgtcggcg gccaagccc ggcaggcgtg gccctcagtg gcgttctgat cccctgtgc tacctgggtg tgtcgtggt ggcctgtcgtg ggtaacctgc tggatcatga tgtgtcctg cggcacacgg ccagccctc agtccaccaac gtctacatcc tcaacctggc gctggccgac gactcttca tgtggggct gcccttctg gcgcccaga acgectgtc tactggccc ttcgctccc tcatgtgcc cctgtcatg gcgtggatg gcatcaacca gttcaccagc atattctgc tgaactgcat gacgtggac cgtaacctg ccgtggtaca tcccaccgc tggcccgct ggcacacag tccgtggcc cgacaggtca gcgcgctgt gtgggtggcc tcagccgtg tgggtctgcc cgtgtgtgc ttctcgggag tgcccgcgg catgacacc tgccacatgc agtgcccga gccggcgcg gcctggcgg ccggttcat catctacacg gccgactgg gcttcttcg gccgtgctg gtcatctgc tctgtacct gctcatctg gtgaagtg gctcagctg gcgcgggtg tgggaccct cgtgcagcg gcgcggcg tccgaacgca ggtcacgcg catggtgtg gccgtgtg cgtcttctg tctgtctg atgcttct acgtgctcaa catgctcaac gtgtgtgcc cactgcccga ggagctgc tctttggc tctacttct ggtgtggcg ctgccctat ccaacagctg tgccaaccc atccttat gcttctctc ctaccctc aagcaggct tccgagggt cctgtgcgg cctcccgcc gtgtgcgag ccaggagccc actgtgggc ccccgagaa gactgagg gaggatagg aggagagga tggggaggag agcaggagg ggggcaagg gaaggagatg aacggccgg tcagccagat caccagcct ggcaccagc ggcaggagc gccgccagc agatggcca gcaaggaga gcagctccta cccaagagg cttccactg ggagaagtc agcagatgc gcatcagta cctgtag MDMLHPSSVS TTSEPNASS AWPDPATLGN VSAGSPAGL AVSGLIPLV YLVVCVGLL P GNSLVIVVL RHTASPSVTN VYILNALAD EFMGLPFL AQNALSYWP FGLMCRILVM AVDGINQFTS IFCLTVMSVD RYLAVVHPT SARWRTAPVA RTVSAVWVA SAVVLPVVV FSGVPRGMSI CHMQWPEPAA AWRAGEIYT AALGFPGPLL VICLCYLLV VKRSAGRRV WAPSCQRRR SERRVTRMV AVVALEVLW MPFYVNLIN VCPLEPEA FGLYFLVVA LYANSCANP ILYGFLSYRF KQGRVLLR PSRRVRSQEP TVGPPEKTEE EDEEEDEEE SREGGKGEM NGRVSIQTP GTSGQERPPS RVASKEQQLL PQEASTGEKS STMRI SYL </p>	Homo sapiens
316	4482	Somatostatin NP_001042.1 Receptor Type 3		Homo sapiens

317	4483	Somatostatin NM_001052 Receptor Type 4	atgagcgccc cctcgacgct gcccccggg ggcgaggaag ggcctggggac ggcctggccc A tctcagcca atgcagtag cgtcccgcg ggcgaggaag agcggtgac ggcgcccggg gacgcgggg cgcggggcat ggtcgctatc cagtgcatc agcgctggt ggcctgggtg ggctgggtg gaaagccct ggtcatcttc gtgaccttc gtcagccaa gatgaagacg gctaccacca tctacctgt caacctggc gtacggagc agctcttcac gctgagcgtg cccttcgtg cctcgtggc cgcctggc cactggcctc tgcgctcgt gctgtgcgc gcggtgctca gctcgacgg cctcaacatg ttcaccagc tctctgtct cactgtctc agcgtggacc gctacgtggc cgtgtgac cgtctggcg cgcgaccta cgcggcgccc agcgtggcca agctatcaa cctggcggtg tggctggcct cctgtgtgt cactctccc atcgccatct tcgagacac cagaccgct cgcggcgcc agcggtggc ctgaaacctg cagtggccac accggcctg gtgcgagtc ttcgtggtt acacttctc gctgggcttc ctgtgcccg tctgggcat tggcctgtg tacctgtca tctgtgggcaa gatcgcgcc gtggccctgc cgtgtggctg gcagcagc agcgctcgg agagaaaat caccagctg gtgctgatgg tctgtgctg cttgtgtc tctgtgagc ctttctact gtcgacgtg ctgaacctcg tctgacacg ccttgatgc accgtcaacc acgtgtccct tctctcagc tatgcaaca cgtgcgcaa cctattctc tatgcttcc tctcgacaa cttccgcga tcttccagc ggttctctg cctgcgtgc tgcctcctg aggtgctg aggtgctgag gaggagccc tggactacta tgcactgct ctaagagca aggtggggc aggtgctg tgccccccac taaaatgcca gcaggaagc ctgcaaccg aaccgggccc caagcgatc ccctcacc gaccaccac cttctga 318	4483	Somatostatin NP_001043.1 Receptor Type 4	MSAPSTLPPG GEEGLTAMP SAANASAPA EAERAVAGP DARAGMVAI QCIYALVCLV P GLVGNALVIF VILRYAKMT ATTIIILNLA VADELFMISV PFVASSAALR HWPGSVLCR AVLSVDGLNM FTSVFLTLV SVDRYAVVH PLRAATYRR SVAKLINLV YLIVGKMRA IAIFADTRPA RGGQAVACNL QWHPAWSAV FVYTFLLG LLPLAIGLC TVNHVSLILS VALRAGWQOR RRSEKKITRL VLMVVVFL CWMPPYVQL INLVTSIDA TVNHVSLILS YANSCANPIL YGFLSDNFR SFQVLCIRC CLLEGAGGAE EEPDYYATA LKSGGAGCM CPPLKQQA LOPEGRKRI PLTRTTF 319	4484	Somatostatin NM_001053 Receptor Type 5	atggagcccc tgttccagc ctcacgccc agctggaacg cctctccc ggggctgccc A tctggaggcg gtgacaacag gacgtggtg ggcgcggcgc cctggcag ggcgcggcg gtgctgtgc cgtgctgta cctgctgta cctgctgta gctgctgta gacacgctg gtcatctacg tgggtgctg cctcgccaag atgaagaccg tcaccaacat ctactctc aacctggcag tggcgacgt cctgtacatg ctgggctgc cttctctgc caccagaac gocggtcct tctggccctt cggccctgc cttctgcctg acagtcatga gctgacgacg gtcaaccagt tcaccagtgt cttctgcctg cgcgcggcgc gctgggcaa gctggcagc gtggtgacc cgtgagctc ggcgcgtg cgcgcggcgc gctgggcaa gctggcagc gocggtcct ggttctgtc tctgtgatg cgccagctg cctgtgtgt cgcgacgtg caggagggcg gtacctgcaa cgccagctg cggagcccg tgggctgtg ggcgcgctc ttcatctat acagggcct gctggcttc ttcgcccgc tgcgtgtcat cgtctgtg tacctgctca tctgtgtgaa ggtgagggcg gcggcgctg gcgtgggctg cgtgagggcg cgctcgagc ggaagtgac gcgcatggtg ttggtggtg tgcgtgtgt tgcgggagtg tggctgccc tctcaccgt caacatctc aacctggcg tggcgtgccc ccaggagccc
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320	4484	Somatostatin NP_001044.1 Receptor Type 5	MEPLFPASTP SWNASSPGAA SGGDNRTIV GPAPSAGARA VLVPVLYLIV CAAGLGGNTL P VIYVVLREFAK MKTWTNIYIL NLAADVLYM LGLPFLATON AASEWFFGPV LCRLVMTLDG VNQFTSVFCL TMSVDVRYLA VHFLLSARW RRPVAKLAS AAFWVLSLCM SLPLLVFADV QEGFTCNASW PEPVGLWAV FFIYTAVLGF EAPLIVICLC YLLIVVKVRA AGVRVGCVR RSERKVTMW LVVVLVFAGC WLPEFTNIV NLAVALPQEP ASAGLYFFVW ILSYANSCAN PVLVGLFLSDN FRQSFQKVIC LKSGGAKDA DATEPRPDRI RQOEATPPA HRAAANGLMQ TSKL	Homo sapiens
321	4552	Tachykinin Receptor 1	aaattcagagc caccgcgggc agggggggcag tgcattccaga agcgtttata ttctgagcgc A cagttcagct ttcaaaaaga gtgctgcccc taaaaagcct tcaacccctc ttctgtcttt agaaggaccc tgagcccccag gcgccagcca caggactctg ctgcagagggg ggggttggtga cagatagtag gctttacgcc tagcttcgaa atggataaac tctcccgggt ggactcagac ctctcccaa acatctccac taacacctcg gaacccaatc agttcgtgca accagcctgg caaatgtcc ttggggcagc tgcttacacg gtcattgtgg tgacctctgt ggtggggcaac gtggtagtga tgtggatcat cttagccccc aaagaatga ggacagtgc gaactatctt ctgtgaaacc tggccttcgc ggagccctcc atgctgctgc taataacagt ggtgaacttc acctatgctg tccacaacga atggtactac ggcctgttct actgcaagt ccacaacttc tttcccatcg ccgtgtctt cgccagtatc tactccatga cggctgtggc ctttgatagg tacatggcca tcatacatcc cctccagccc cggctgtcag ccacagccc caagtggtc atctgtgca tctgggtcct ggctctctg ctggccttc cccagggcta ctactcaacc acagagacca tgcccagcag agtcgtgtgc atgctcgaat ggccagagca tccgaacaag attatgaga aagtgtacca catctgtgtg actgtgtgta tctacttct cccctgctg gtgattggct atgcatacac cgtagtggga atcacactat gggccagtga gateccccggg gactcctcg accgtacca cgagcaagtc tctgccaagc gcaaggtggt caaatgatg attgtcgtgg tgtgcacctt cgccatctgc tggctgccc tccacatctt ctctcctg ccctacatca accagatct ctacctgaag aagtttatcc agcaggtcta cctggccatc atgtggctgg ccatgagctc caccatgtac aaccocatca tctactgctg cctcaatgac aggttcctgc tgggttcaa gcatgcttc cggctgtgccc ccttcacag cgcgggcgac tatgaggggc tggaaatgaa atccaccgg tatctccaga cccaggggcag tgtatacaaa gtcagccgcc tggagaccac catctccaca gtggtggggg cccacgagga ggagccagag gacggcccca agggcacacc ctgctccctg gactgacct ccaactgctc ttcaggaagt gactccaaga ccatgacaga gacttcagc ttctctcca atgtgctctc ctaggccaca gggaccttgg caggtgcagc cccactgcc ttgacctgc ctcccttcat gcatggaat tcccttcac tggaaaccatc agaaacccc tcacactggg acctgcaaaa aggtcagta tgggttaggg aaaaattcc atccttagt caaaaactt caattcttcc ctatcttgc caccctcatg ctgtgtgact caaaccat cactgaactt tgctgagcct gtaaaataa aggtcggacc agcttttct caagagcca atgcattcca ttctggagag tgactttggc	Homo sapiens

322	4552	Tachykinin Receptor 1	NP_001049.1	tgcatgcgag tgctcatttc aggatg	MDNVLPVDS LSPNISTNTS EPNQFQPAW QIVLWAAAT VIVTSWGN VVWMIILAH P KRMIVTNYF LVNLFAEAS MAENTVNF TYAVHNEWY GLFYCKFNF FPIAAVFASI YSMTAVAFDR YMAIHPLOP RLSATATKV ICWIVLALL LAFQGYIST TETMPSRVVC MIEMPEHPNK IYKVVYHICV TVLIYFLPL VIGYATVWG ITLWASEIPG DSSDRYHEQV SAKRKVVRMM IVVCTFAIC WLPFHIFELL PYINPDLYK KFIQQVYLAI MWLAMSSTMY NPIIYCLND RFLGFKHAF RCCPFISAGD YEGLEMKSTR YLQTQGSVYK VSRLETTIST VUGAHEEPE DGPXATPSSL DLTSNCSSRS DSKTWTESFS FSSNLS	Homo sapiens
323	4687	Thrombin Receptor	NM_001992	ggcgggggc gcacagagc agaggggctt gcgagggcg gctgagggac cgcggggagg A ggcgcccgag cggctccagc gcagagactc tcactgcac gcgagggccc ctctcgcct ccgcgcgc gacgcgcgc ccagtcgc accctgatc taccgtggg caccctgcg ctcgctgoc gctgcgcgag gctgccttg accctgatc taccgtggg caccctgcg ctcgctgoc gcgaagaccg gctcccgac ccgcagaagt cagagagag ggtgaagcgg agcagccga ggcgggcgag cctccggag cagcgcccg cagagcccg gacaatggg ccgcggcgg tgtgctggt ggccgcctc ttcagctgt ggcgcctgc gtgtctgc cgcacccgg ccgcagggc agaatacaaa gcaacaatg ccacctaga tcccggtca tttcttca ggaacccaa tgataaat gaaccattt gggaggatga ggagaaaaa gaaagtggg taactgaata cagattagtc tccatcaata aagcagtc tctcaaaaa caactcctg cattcatc agaagatgc tccgatatt tgaccagtc ctggctgaca ctcttctgc catctgtga caccggagt tttgtagtca gccctccact aacatcatg gccatcgtt tgttcatcct gaaaatgaag gtcaagaagc cggcggtgg gtacatgctg caccctggca cggcagatgt gctgttttg tctgtgctc ctttaagat cagctattac tttccggca gtgattggca gttgggtct gaattgtgc gcttcgtac tgcagcatt tactgtaaca tgtacgcctc tatctgtc atgacagtc taagcattga ccggtttctg gctgtggtg atcccatgca gtccctctc tggcgtactc tgggaaggc ttccttact tgcctggca tctgggctt ggccatgca ggggtagtgc ctctcgtcct caaggagcaa accatccagg tgccgggct caacatcact acctgtcatg atgtgtcaa tgaacccctg ctcgaaggct actatgcta ctacttca gccctctg ctgtctctt tttgtgccc ctgactat ccacggtctg ttatgtgtc atcattgat gtctagtc ttcgcagtt gccacccga gcaagaagtc ccgggcttg ttcctgtcag ctgctgtt ctgcattc atcattgct tcggaccac aaagtcctc ctgattgagc attactcatt ctttctcac acttccacca cagaggctg ctacttggc tactctct ctgtctgtg cagcagcata agctcgtga tcgacccctc aatttactat tactctct tactctct gtgtctgtg cagcagcata agctcgtga tatgtgcaa agaaagtcc gatccagca gttataacag cagtggcag ttgatggcaa gtaaaatgga tactgtctc agtaacctga ataacagat atcaaaaaa ctgttaact aggaaaaagg actgctggga gtttaaaaaa aaagtctat aaagtgaat aactcagga ttctattagt cccccccaa actttatga ttcactctc aaacaacag atgtacgact tgcatactg ctttttatgg gagctgtcaa gcatgtatt ttgtcaatta ccagaagat aacagacga gatgacggtg ttattccaa ggaatatgc caatgctaca gtaataatg aatgtcact ctggatatag ctaggtgaca tatatactac tacatgtgtg tatatgtaga	Homo sapiens	

324	4687	Thrombin Receptor	NP_001983.1	<p> tgatgcaca cacatatatt atttgcagtg cagtataga taggcacttt aaacactct ttcccgcac ccagcaatt atgaaaataa tctctgattc cctgatttaa tatgcaaatg ctaggttggg agagtttagc cctgaacatt tcatgggtgt catcaacagt gagagactcc atagtttggg cttgtaccac ttttgcfaat aagtgtattt tgaattgtt tgacggcaag gtttaagtta ttaagaggta agacttagta ctatctgtgc gtagaagtgc tagtgttttc aattttaaac atatccaagt ttgaattcct aaaattatgg aaacagatga aaagcctctg ttttgatag ggtagtattt ttacatttt acacactgt cacataagcc aaactgagc ataagtcctc tagtgaatgt aggtggctt tcagagtagg ctagggtccat gtcagacaca tgtccgccc cgatggagga ctccaggcag cagacacatg ccagggtccat gtcagacaca gattggccag aaaccttctc gctgagctc acagcagta gactggggcc actacattg ctccatctc ctgggattgg ctgtgaactg atcatgttta tgagaaactg gcaagcaga atgtatata ctaggaggta atgacatga aagacttctc taccatctt aaaacaaag aaagaaggca tggacttctg gatgccatc cactgggtgt aaacacatct agtagtgtt ctgaaatgac agagtggat aagacagaga cctgccctc agagcaaatg agatcatgca tagagtgtga tgtatgtga ataatatgt ttacacaaa caaggtcctg cagctaaaga agtttgaaca ttgggttac tattctgtt ggttataact taatgaaaac aatcagtagc aggacatata ttttttaaaa taagtctgat ttaattgggc actatttatt tacaatgtt ttgtcaata gattgtcaa atcaggtttt ctttaagaa tcaatcatgt cagtctgctt agaaataaca gaagaaaata gaattgacat tgaatctag gaaattatt ctataattc cattactta agactaatg agactttaa agcattttt aaacctctaa gtatcaagta tagaaaatct tcatggaatt cacaaagtaa ttggaaatt aggttgaac atatctcta tcttacgaaa aatgggtagc attttaaaca aatagaaa ttgcaaggca aatgtttatt taaaagagca ggcaggcgc ggtggtcac gccgtaat ccagcacttt gggaggctga ggcgggtgga tcacgaggtc aggagatcga gaccatctg gctaacacgg tgaacccgt ctctactaaa aatgcaaaa aaattagccg ggcgtggtgg caggcacctg tagtccagc tactcgggag gctgaggcag gagactggcg tgaacccagg agcggaacct tgtagtgagc cgagatcgcg ccactgtgct ccagcctggg caacagagca agactccatc tc MGPRRLILVA ACFLCGPLL SARTARRPE SKATNATLDP RSFLRNPNP KYEPWEDEE P KNESGLTEYR IVSINKSSPL QKQLPAFISE DASGLTSSW LTLFVPSVYT GFVVSLLPLN IMAIVVFILK MKVKPAAVY MLHLATADVL FVSVLPFKIS YFSGSDWQF GSELCRFVTA AFYCNMYASI LLMTVISIDR FLAVYPMQS LSWRTIGRAS FTCLAIWALA IAGVPLVLK EQTIQVPLN ITTCHDVINE TLLEGYYAYY FSFAVAFVFF VPLIISTVCY VSIIRCLSSS AVANRSKSR ALFLSAAVFC IFIICFGPTN VLLIAHYSFL SHTSTEAAY FAYLLCVCVS SISICIDPLI YYYASSECQR YVYSILCKE SSDPSSYNS GQLMASKMDT CSSNLNLSIY KKLLT </p>	Homo sapiens
325	4734	Thyrotropin Releasing Hormone Receptor	NM_003301	<p> tagcttcaag ccactgaaga tggaaaacga gacagtcatg gaactgaacc aaacacagt A tcagccacga gcagtggttg ccttagaata ccagtggtgc accactttac ttgtactcat tatttggtgc ctgggcatgg taggcaacat catggtagtc ctggttggtca tgagaaccaa gcacatgagg acccccacaa actgctacct ggtgagcctg cgagttagctg atctcatggt cttggtggcc gcagggtccc ccaacataac agacagtatc tacggttctc gggtctatgg </p>	Homo sapiens

326	4734	Thyrotropin Releasing Hormone Receptor	NP_003292.1	ctatgttggg tgcctctgca ttacttacct ccagtatttg ggaattaatg cctcctcttg ttcaataaca gcctttacca ttgagaggta catagcaatc ttgtaccccca tcaaaagccca gtttctctgc acattttcca gagocaaaaa gattatcatc ttgtctggg ctttcacatc tctttactgt atgctctggg tcttcttgct ggatctcaat attagcacct acaagatgc tatttgata tctgtgggt acaagatctc caggaattac tactcaccta ttaccta ggactttggg gtcttttatg ttgtgccaat gatcctggct accgtcctct atgattcat agctagaatc cttttcttaa atcccatctc ttcatatcct aaagaaaact ctaagacatg gaaaaatgat tcaaccatc agaacacaaa tctgaatgta atacctcta atagatgttt caacagcaca gtattttcaa ggaagcaggg caccaagatg ctggcagtggt ttgtaattct gtttgccctt ttatgtatgc cctacaggac tctagtgggt gtcaactcat ttctctccag tcctttccaa gaaaattggg ttgtctctt ttgcagaatt tgcattttat tcaacagtgc catcaacccg gtgatttaca atctatgtc ccagaaattc cgtgcagcct tcagaaagct ctgcaactgc aagcagaagc caacagagaa acctgctaac tacagtgtgg cctaataat cagcgtcatc aaggagtcag acctttcag cacagagctt gatgatata ctgtcactga cacttacctg tctgcacaa agtgtcttt tgatgacacc tgcctggctt ctgaggtatc ctttagccaa agttgattca tgaattagaa gaaaatggat gacaaagaaa ttgagaatct gtgcagtcac caacaaaag gagaacatgg ccaatagtca tatgtgaaga cagagcagat cagctcttgg caatgctcta acaaacccg	Homo sapiens
327	4944	Angiotensin II Type 1 Receptor	NM_000685	dhfsteiddi tvtdtylsat kvsfddtcla sevsefsqs attcggagct gcctctctgc caatgattcc agcctctgac agccaggacc ccaggcagca gcgagtga gacgtcttg accgctctgc cgttagcagc tctgcgggc gcgctgggtg atcgatggg agcggcttga gcgacccag cagtgaggg cgacagccg ggacccgag cgggcgggg ggagaccgc accagcgcg ccggcctctc gcggacgtg acgacgcgc cgggcgggg gtttgatatt tgacaaattg atctaaaatg gctgggttt tatctgaata actcaatgat gccatcccg aaagtccgca ccagtgat ttgatatagt gttgcaaca aatcgacc agtgatcaa atgattctc aactctcta ctgaagatg tattaaga atccaaatg attgtccca agctggaag cataattaca tattgtcat gattctact ttatacagta tcatcttgg ggtggaata ttggaaaca gcttggtgtg gatagtcatt tacttttata tgaagctgaa gactgtggcc agtggtctc tgggtgtct acacagctat ggaatccgc gacttatgt ttttactgac tttgccacta tgggtgtctc acacagctat ggaatccgc tggccctttg gcaattacct atgtaagatt gcttcagcca gcgtcagtt caacctgtac gctagtgtg ttctactcac gtgtctcagc attgatcgat acctgctat tgttaccaca atgaagtccc gcttcgacg cacaatgctt gtagcaaatg tcacctgcat catcattgg ctgctggcag gcttgccag ttgcccagct ataatccatg gaaatgtatt ttcatgtg aacaccaata ttacagttg tgctttccat tatgagtcct aatccaac ccttcgata	Homo sapiens

328	4944	Angiotensin II Type 1 Receptor	NP_000676.1	<p>gggtggggcc tgacaaaaa tatactgggt ttctgtttc cttttctgat cattcttaca agttatactc ttatttgaa ggcctaaag aaggtttatg aaattcagaa gaacaaacca agaaatgatg atatttttaa gataattatg gcaatttgac ttctcttttt ctttccctgg attccccacc aaatttcac ttittctgat gtattgattc aactaggcat catactgac tgtagaattg cagatattgt ggacacggcc atgctatca ccatttgat agcttatttt aacaattgcc tgaatcctct tttttatgac ttctgtggga aaaaatttaa agatatattt ctccagcttc taaatatat tccccaaaa gccaaatccc actcaaacct ttcaacaaaa atgagcacgc ttctctaccg ccctcagat aatgtaagt catocacca gaagcctgca ccatgttttg aggtgagtg acatgttcga aactgtcca taaagtaatt ttgtgaaaga aggagcaaga gaacattcct ctgcagcact tcactaccaa atgagcatta gctacttttc agaattgaag gaaaaatgc attatgtgga ctgaaccgac ttbtctaaag ctctgaacaa aagcttttct ttcttttgc acaagacaa agcaaaagcca cattttgcat tagacagatg acggctgctc gaagaacaat gtcagaacct cgatgaatgt gttgatttga gaaattttac tgacagaaat gcaatctccc tagctgctt ttgtcctgtt atttttatt tccacataaa ggatattaga atatattaaa tcgttagagg agcaacagg gatgagagt ccagatttgtt ctgtccagtt tccaaaggcc agtaaatgtt tcgtgccggt ttccagctat tagcaactgt gctacacttg cactggtgac tgcaactttt gtacaagat atgctaagca gtatcgtca agttgcagat ctttttgtga aattcaacct gtgtcttata ggtttacact gccaaaaaa tgcccgtaag atggtttatt tgtataatgg tgttactaaa gtccatata aagtttaaac tacttgtaaa ggtgctgcac tgggtccaaag tagtagtgct cctctagtat attagtttga tttaatatct gagaaagtga tatagtttgt ggtaaaaaa ttatatatca taaagtatgc cttctctgtt aaaaaagta tatattctac acatatat atattatat ctatatctct aaactgctgt taattgatta aaactgtgca aagttatat tactttaaa taaataaatt ttattgc</p>	Homo sapiens
329	4946	Angiotensin II Type 2 Receptor	NM_000686	<p>TVASVFLLNL ALADLCFLLT LPLWAVYTAM EYRWPFGNYL CKIASASVSF NLYASVFLLT CLSIDRYLAI VHPMKSLRR TMLIVKVTCT IWLWLAGLAS LPAIHRNVF FIENITIVC AFHYESQNST LPIGLGILTKN ILGFLFPFLI ILTSYTLIMK ALKKAYEIQK NKPRNDIDIFK IIMAIVLFFF FSWIPHOIFT FLDVLIQLGI IRDCRIADIV DTAMPITICI AYFNCLNPL FYGFLGRKFK RYFLQLKYI PPKAKSHSNL STKMSTLSYR PSDNVSSSTK KPAPCFEVE acgtccacgc gtctgagaga acgagtaagc aagaattcaa agcattctgc agcctgaatt A ttgaaggagt gtgttttaggc actaagcaag ctgatttatg ataactgctt taaactcaa caaccaaagg cataagaact aggagctgct gacatttcaa tatgaagggc aactccacc ttgccactac tagcaaaaac attaccagcg gtcttcaact cgggcttctg aacatctctg gcaacaatga gtctaccttg aactgttcac agaaaccatc agataagcat ttagatgcaa ttcttattct ttactacatt atatttgtaa ttggatttct ggtcaatatt gtctgggta cactgttttg ttgtcaaaag ggtccctaaa aggtttctag catatacatc ttcaacctcg ctgtggctga ttactcctt ttgggtactc ttctctatg ggcaacctat tattcttata gatatgactg gctctttgga cctgtgatgt gcaaaagtttt tggttctttt cttacctga acatgtttgc aagcattttt ttatcacct gcattgagt tgataggtag caatctgtca ttacacctt tctgtctcaa agaagaaatc cctgggcaagc atcttatata gtccctctg</p>	Homo sapiens

330	4946	Angiotensin II Type 2 Receptor	NP_000677.1	<p>tttgggtgat ggctgtgttg tctctattgc cacaatttta ttttcgagac gtccagaacca</p> <p>ttgaataactt aggagtgaat gcttgcatta tggtcttccc acctgagaaa tatgcccaat</p> <p>ggtcagctgg gattgctta atgaaaaata tcttggttt tattatccct ttaatatca</p> <p>tagcaacatg ctattttgga attagaaaac acctactgaa gacgaatagc tatgggaaga</p> <p>acaggataac cagtgaacca gtccctgaaga tggcagctgc tgtgttctg gcttcatca</p> <p>tttggtgctt tcccttccat gttctgacct tccctgagtc tctggcctgg atgggtgtca</p> <p>ttaatagctg cgaagttata gcagtcattg acctggcact tccctttgcc atcctcttgg</p> <p>gattcaccaa cagctgcgtt aatccgtttc tgtattgttt tgttggaaac cggttccaac</p> <p>agaagctccg cagtgtgtt agggttccaa ttaattggct ccaagggaaa agagagagta</p> <p>tgtcttgccg gaaaagcagt tctcttagag aaatggagac aaatgtgtct taaacggaga</p> <p>gcaaaatgca tghtaatcaac atgggtactt gctttgaggc tcaccagaat tatttttaag</p> <p>tgtttttaat aaataataa aatttccct aatctttct gaatcttctg aaaccaaattg</p> <p>taactatgtt tatcgtccag tgactttcag gaatgccat tgttttctga tatgtttgta</p> <p>caagatttca ttggtgagac atatttacc aaactgaagta acctgtgata tatctcaaat</p> <p>tghtaataat aatagattgt gaataatgat ttgggattc agtttctct ttgaacattg</p> <p>cttgtgttct ttagtgggtt ttatatcca tttttatcag gatttctct tgaaccagaa</p> <p>ccagctcttc aactattgc atcatttaca agacaacatt gtaagagaga tgaqcacttc</p> <p>taagttgagt atattataat agattagtac tggattatc aggccttagg catagtcttc</p> <p>tttaaaaaag ctataaatta tattctctct gcatcttcaat tgagtggagg tttatagtta</p> <p>atctataact acatatgaa tagggctagg aatatagatt aaatcatact ccatctgctt</p> <p>agcttatatt tacagttata gaaagcaaga tgtactata catagaattg caatctataa</p> <p>tatttgtgtg ttactataac tctgaataag cacittttaa aaaactttct actcatttta</p> <p>atgattgttt aaaggtttct attttctctg atactttttt gaaatcagta acaactgtgt</p> <p>attgttgtaa aatglaaagg tcaacttttca catccttgac ttttagatg tgcgtctttg</p> <p>atatagga cattgattt atttttatta ttaatgcttt ggttctgggt tgttctctaa</p> <p>aaatctggg tggcttataa aaaactcttt aactctaat aaaccttaa cttgcatagg</p> <p>aaatggtatc cagaattgaa ttttctaca tggggctctg gtgggggcaa agagacccag</p> <p>tcaattacat gtttggtagc aagaaaggaa cctgtcaggg cagtacaaatg tgactttgaa</p> <p>aatataacc gtgggggtag ttttacccta tatctataa cactgtttgt tccagaatct</p> <p>gtatgattct atggagctat tttaaaccaa ttgcaggtct aga</p>	Homo sapiens
331	5072	Pyrimidinerg ic Receptor P2Y4	NM_002565	<p>atggccagta cagagtcctc cctgttgaga tccctaggcc tcagccagg tctcggcagc</p> <p>agtggaggtg agctggagctg ttggtttgat gaggatttca agttatcct gctgcctgtg</p> <p>agctatgcag ttgtcttctg ctggggcttg ggccttaacg ccccaacct atggctctc</p> <p>atcttccgct tccaccctg ggatgcaacg gccactaca tgttccacct ggcattgtca</p>	Homo sapiens

332	5072	Pyrimidinerg NP_002556.1 ic Receptor P2Y4	gacacctgtg atgtgctgtc gctgcccacc ctcatctact attatgcagc ccacaaccac tggccctttg gcactgagat ctgaagttc gtccgtttc ttttctattg gaacctctac tgagtgtec ttttctctac ctgcacagc gtgcaccgtt accctggcat ctgccacca cttcggggac tacctggtgg cgcgcctcgc ctgcaggcc ttctctgect ggcagtttgg ttgtgctgag cggctgctct cgtgcccacc ctgttctttg tcacaaccag caacaaaggg accacgtctc tgtgccatga caccactcgg ctgaagagt ttgaccacta tgtgcacttc agctcggcgg tcatggggct gctctttggc gtgcccctgc ttgtcactct tgtttgctat ggactcatgg ctgctgctct gtatcagccc ttgccaggct ttgcacagtc gtcttctcgc ctcgcctctc tcgcacccat agctgtgttg ctgactgtct ttgctgtctg ctctgtgctc ttccacatca cccgcacccat ttactacctg gccaggctgt tggaaagctga ctgccgagta ctgaacattg tcaactgtgt ctataaagtg actcgggccc tggccagtgc caacagtgc ctggatctctg tgtctactt gtccactggg gacaaatc gcgtcagct ccgtcagctc tgtgtgtgtg gcaagcccca gcccgccacg gctgcctctt cctgggcaat agtgcctctg cctgaggata gcagctgcag gtggggcgcc acccccagg acagtagctg ctctactcct aggcagata gattgtaa	Homo sapiens
333	5117	Vasopressin NM_000706 V1A Receptor	taattgcttg aagattttt tccagacagg tggctggaa acctttacc tattacctc A catccctgaa ccatttcaat ctctgcctc ctggatatct tggagaaaaat gaaccaacac aacacagctt tcagttttta gacatttcc cccatcacaga acattgtctt acttgatctt cccgatgacc tcaacaacag gaaagcgagg tcccttcatt tccatttata agacgcacag accagagatt atctagccac aggaagcagg actccagatt tcaagtccag catctcaacg tgacaacctt gtaactctg catgaacgga ctggatagta aagtggaaatt attactgaga actgcaatga ataaatctt ttgcattttt tgcctacgtt tcacagaggg tgatatctt ctgaggcaat taaatttata ccacggccc acactgaaa cgttctgacc acaaaagtca tgctcctgca tctacacagc agataactgc agaaacggct tcttctctc ctgtaaaaat tgctgaaaa cagctcccc ttgctgtccg tcgagggcata tcttaccacaa cgttaaaaa gagctgaggg agatcgcat tctgctctcc tcccgccctg cagaggggct ccagctgttc agagtaacgg attactaggt aggtgtgtgt tccctctct tccaggggc tcttctctc ctttgagatt gcctcttctt tactcctgag cacaggagcc gggcggggtt tctgtccctt gccctggaca gcactgcctg gatggcctg gtccggcagc tgcctttgt ccaccaaaa agatgtcccc acgactcagt agtaaccaga cgggtccccc ggaccactgc gccaataatt ccgccatccc cgctgtggga atcaggcttt tcccgagaa accccaggga atctagagaa aactccttaa gtccctagtc tccatagaga aaaccaggga acactcccc caaacccgc tgtgaatata ggcacagcag ccactggggc ctgaaagtga tgagtgcgtt ctcccgctg caaacatagg gtaataata gcatgcatca aagacgttac taggaagaga tagctcttta	Homo sapiens

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ttttcattc taacataagt aagacttgat tggtttaaa gtcacataa atcggcact

249/448

Homo
sapiens

334 5117 Vasopressin NP_000697.1 P
V1A Receptor

atttctgaac aaagagagct catcatcagt ctttaatttc agagaaaaat tcagagaaat
tatgttttca tccattaaaa ttaatttg catcagaaaa tgcagctta aacagtctcc
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gatcagtatt acaagggtat cctgtgctat gctggacatt acaagatca ttactttcat
gttggggaa ttc

Homo
sapiens

335 5118 Vasopressin NM_000707 A
V1B Receptor

ctccagccgc tgcaccag gcagagcgag cgggcttggc tgggcttcc tgcctgagc
gcgacacga ctgctccga ccgcctcc aagcagctg aaggcttcc gctctggct
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336	5118	Vasopressin V1B Receptor	NP_000698.1	<p>ccaccaatgt ggctttcacc atctctatgc ttttggggcacc cctcaacagc tgtctgaacc</p> <p>cctggatcta catgggcttc aacagccacc tgttaccgct gcccctgcgt caccctgctt</p> <p>gctgtggggg tcccagccc aggatggccc ggcgctctc cgacggcagc ctctcgagcc</p> <p>gccacaccac gctgctgacc cgctccagct gccggggccc cctcagcctc agcctcagcc</p> <p>taacctcag tgggagggcc aggcctgaag agtcaccaag ggacttggag ctggcagatg</p> <p>gggaaggcac cgctgagacc atcatctttt agaaagact cgtgggggtc tggctactgcc</p> <p>cccaggacta gtggaggttc tctgccacc tcaggcactg gaaatgagag ctgggagggt</p> <p>aaggggttga gttagaggag gccctgtctg aagcagagc aaaaggccag atgggttccc</p> <p>ctacctggt gtcacagctg cccctagtgt gagggctgcc cataagctc ccaatctcag</p> <p>acactggcag tcaggagaaa tcaaatgcc tgtctccctg gtcctgccat attcataggg</p> <p>tgcccatgca cacatggtgt cccagatcta ggaggcccta ggtggtgct gctaggggt</p> <p>ccacgggtgg caggaattca gaggtggcc ttgtgccctg gctacctgc tccattctaa</p> <p>cctgactgc acatctcagc ctaccagga gagggagaa gtgaaaaacc gtgaggagga</p> <p>ctctatttg atcctggatt tgttgttgt ttgttagaga gaa</p> <p>ctctatttg atcctggatt tgttgttgt ttgttagaga gaa</p>	Homo sapiens
337	5119	Vasopressin V2 Receptor	NM_000054	<p>QLGKRKRMH LFLVHLALTD LAVALFQVLP QLLWDITYRE QGPDLLCRAY KYLOVLSMFA</p> <p>STYMLIAMTL DRYLAVCHPL RSLQPGQST YLLIAAPWLL AAFSLPQVF IFSLEVIQ</p> <p>SGVLDQWADF GFWGPRAYL TWTTIAIFVL PVTMLTACYS LICHICKNL KVKQAWRVG</p> <p>GGGWRTWDRP SPSTLAATR GLPSRVSSIN TISRAKIRT KMTFVIVLAY IACWAPFFSV</p> <p>QMWSVWDKNA PDEDSTNVAE TISMILGNLN SCCNPWYMG FNSHLLPRPL RHLACCGGPQ</p> <p>PMRRRLSDG SLSSRHTLL TRSSCPATLS LSLSLTSLGR PRPEPSRDL ELADGEGTAE</p> <p>TIIF</p> <p>agaagatcct gggttctgtg catcctgtg tctgaaccat cctctcaatc ttccctgcc A</p> <p>aggactggcc atactgccac cgcacacgtg cacacagcc aacaggcatc tgccatgctg</p> <p>gcattctctat aagggtctca gtccagagac cctggggccat tgaacttgct cctcaggcag</p> <p>aggctgagtc cgcacatcac ctccaggccc tcagaaacac tgcccagcc ccacatgct</p> <p>catggcgtcc accacttccg ctgtgctgtg gacccgctg ctgccagcc tgcccagcaa</p> <p>cagcagccag gagagccac tggacacccg ggaccgctg ctgcccggg cggagctggc</p> <p>gctgctctcc atagtctttg tggctgtggc cctgagcaat ggctgtgtgc tggcgccct</p> <p>agctcgcggg ggcggcgggg gccactgggc accatacac gtcttcattg gccactgtg</p> <p>cctggccgac ctggccgtgg ctctgttcca agtctgtccc cagctggcct ggaaggccac</p> <p>cgaccgcttc cgtgggccag atgcccgtg tcggggccgtg aagtatctgc agatgtgtgg</p> <p>catgtatgcc tctcctaca tgatcctggc catgacgctg gaccgccacc gtgccatctg</p> <p>ccgtcccag ctggcgtacc gccatggaag tggggctcac tggaaaccgc cggctgtagt</p> <p>ggcttgggcc ttctcgtccc ttctcagct gcccaagctc ttcatcttcg cccagcgcaa</p> <p>cgtggaaggt ggcagcgggg tcaactgacty ctgggctgc tttggggagc cctggggccg</p> <p>tcgcacctat gtcactgga ttgcccgtat ggtgttcgtg gcacctacc ttgggtatgc</p> <p>cgccctgccag gtgctcatct tccgggagat tcatgccagt ctggtgccag ggccatcaga</p> <p>gagggcctgg gggcgccgca ggggacggcg gacagcagc cccggtgagg gagccacgt</p> <p>gtcagcagct gtggccaaga ctgtgaggat gacgtagat attgtgtgc tctatgtgct</p> <p>gtgctgggca ccttcttcc ttggtgagct gtggggcgcg tgggaccccg aggcacctc</p>	Homo sapiens

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338	5119	Vasopressin V2 Receptor	NP_000045.1	MMASTTSV ALARRGRGH VGMYSYMI RNVEGSGVT SERPGRRRG PLEGAPFVLL ASSSLAKDTS	PGHPSLPSLP WAPIHVEIGH LAMTLDRHRA DCWACFAEPW RRTGVVTWIA HVSAAVAKTV NMWIASFSS SVSSELRSL CCARGTPPS LGPQDESCIT	SNSSQERPLD ICLADLAVL ICRPMLAYRH GSGAHWNRPV LMVFAVPTIG RMTLVIVVY VLCWAPFFLV QLWAAWDPEA LALISIVFA ATDRFRGPD LVMAFSLLL SLPQLFIFAQ EIHASLVPGR QLWAAWDPEA LGPQDESCIT	TRDPLIARAE FQVLPQLAWK ATDNRFRGPD LVMAFSLLL SLPQLFIFAQ EIHASLVPGR QLWAAWDPEA LGPQDESCIT	VALSNGLVLA LCRAVKYLOM SLPQLFIFAQ EIHASLVPGR QLWAAWDPEA LGPQDESCIT	Homo sapiens
339	5133	Peropsin	NM_006503	gaataagcct ataatttagg aacacaatat taatagttct ttattaacct cctcagatct tgaatatctt acctgacct tgattctggg ctagttatgc gatcttttgt tgatgtttta gcaatgagtc tcatgatctg cttttggtga aatctttctac caatgcttgc ccatggatgt acgtatcaaa gatcaagtgc tgcctccgtt acttatgtct	tcgataatta caacagttca gactcttaata tggttgcact ggcgtttact gtatggaaat ttttgggaat gacgtacct agcctggatc cccagatcct gtcttacacc ctgctattac cctcaacaga catgtttctg cccaagaaga attctataac tgctacactc atcttcaaac aacacttttag atcttcaaac aacacttttag cattgtccta ggctgcactct gatgaattag gatcatcagc	tgaagggtgt gactctaaaa tacttgatta attaaatcac gataatggg tggaatttg gcaagcattg gacgtacct aatggcctgt actggtgcta atgacagtta catgtcacgc gactggtcag gtggcatggg atctctccc cctgcatatt tgctagactc ccattggctt tcttttgaca cctgtccta tgagagtgtg gtgtatgctt gatgaattag gatcatcagc	tcctccata ctcgctctt gataagtatt gacacctcg tcagtacat tggtatccc ctgtcaggtt ggtcgtggct caccacact gatgcctatc aaactggagg ttttattgtg acatcacact tgtaacaaag catcgtgtgc cctgtgtgc tgtaacaaag gctgtgaca agtaatttac agaaaggac agccattta agctctcaa gcacagctcg tctgtgtccc tgaatatca ttaaaggctc cttcttctt	atgtaagaa tcacagactg atcagcaaca aatgcaatta atgtctgctg tatgtctggat gtggacctg tacatcggt atagggtggg aaaaatgata cccttgacag accagtgc atgtctgtga ttatgggctt ctgtttgcaa tttcggaggg agtaatttac agaaaggac agccattta gcacagctcg tgaatatca cttcttctt	Homo sapiens

340	5133	Peropsin	NP_006574.1	ccctattatg gcatgcatta cactgtactg atgaccttta acttgccctg ctcc	Homo sapiens
				MLRNNLGNSS DSKNEDGSVF SQTEHNIVAT YLIMAGMISI ISNIIVLGF IKYKELRTP P	
				NAIINLAVT DIGVSSIGYP MSAADSLYGS WKFGVAGCQV YAGNIFFGM ASIGLLTVVA	
				VDRYLITCLP DVGRMTTNT YIGLILGAWI NGLFWALMPI IGWASYAPDP TGATCTINWR	
				KNDRSFVSYT MTVIAINFIV PLTMFYCY HVTLSIKHHT TSDCTESLNR DWSQIDVTK	
				MSVIMICMFL VAWSPYSIVC LWASFGDPKK IPPPMALIAF LFAKSTTFYN PCIYVVANKK	
				FRRLAMFEX CQTHQTMPTV SILPMDVSQN PLASGRI	
341	5519	Brain-Specific Angiogenesis Inhibitor 1	NM_001702	ggactttaga agcctgtgct gccctctctg tcacctgaag cggggccctc tccatccca A	Homo sapiens
				cccttgccc gccctccctg ccccaccggg ccggccctg ccggccggg accctggcat	
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342	5519	Brain-Specific Angiogenesis Inhibitor 1	NP_001693.1	MRGQAAAPGP	WMLAPLLL	LLLLRRARA	AAGADAGPG	EPCATLVQK	FFGYFSAAV	P	Homo sapiens
				FPANASRCWS	TLRNPDP	RLRY	TLVMKAKAP	VPCSPGRVR	TYQDSFLES	TRTYLGVSEF	
				DEVLRCLDPS	APLAFQASK	QFLQNRQOP	PQHDGLRPA	GPGPTDDFS	VEYLVVGNRN		
				PSRAACMLC	RWLDAACLAGS	RSHPGIMQ	TPACALGEEA	GGPAAGPLAP	RGDVCLRDVA		
				AGGPENCLTS	LTQDRGGHGA	TGGWKLSIW	GECTRDCGGG	LQTRTRTCLP	APGVEGGGCE		
				GVLEGRQCN	REACGPAGRT	SSRSQSLRST	DARREELGD	ELQQFGFPAP	QTGDPAAEEW		
				SPWSVCSSTC	GEWQTRTRF	CVSSYSTQC	SGPLREQLC	NNSAVCPVHG	AWDEWSPWSL		
				CSSTCGRFR	DRTRTCRPPQ	FGNPCEGPE	KQTRFCNIAL	CPGRAVDGNW	NEWSWSACS		
				ASCSQGRQOR	TRECNGPSYG	GAECQHWVE	TRDCFLOQCP	VDGKQAWAS	WGSCSVTCGA		
				GSQRRERVCS	GPFFGGAACQ	GPQDEYRQCG	TQRCPEPHEI	CEDNFGAVI	WKETPAGEVA		
				AVRCPRNATG	LILRCCELDE	EGIAWEPPT	YIRCVSIDYR	NIQMTREHL	AKAQGLPGE		
				GVSEVIQTLV	EISQDGTYS	GDLLSTIDL	RNMTFIFRA	YISPTPGDVQ	NFVQILSNLL		
				AEENRDKWE	AQLAGPNAKE	LFLRVEDFVD	VIGFRMKDLR	DAYQVTDNLV	LSIHKLPASG		
				ATDISFPMKG	WRATGDWAKV	PEDRVTVSKS	VFSTGLTEAD	EASVFVGVTV	LYRNLGSFLA		
				LQRNTTVLNS	KVISVTVKPP	PRSLRTPLEI	EFAHMYNGTT	NQTCILWDET	DVPSSSAPPQ		
				LGPWSWRGCR	TVPLDALRTR	CLCDRLSTFA	ILAQLSADAN	MEKATLPST	LIVGCGVSSL		
				TLMLVLIYV	SWRYRISR	SVILINFCLS	IISNALILI	GQTQTRNKVM	CTLVAFLHF		
				FFLSSEFCWL	TEAWQSYMAV	TGHLRNRLIR	KRFLCLGWGL	PALVVAISVG	FTKAKGYSTM		
				NYCWLISLEGG	LLYAFVGPAA	AVVLVNMVIG	ILVFNKLVSK	DGITDKKLKE	RAGASLWSSC		
				VVPLLIALTW	MSAVLATVDR	RSALFQILEA	VFDSLEGFVI	VMVHCILRE	VQDAVKCRVV		
				DRQEEGNQDS	GGSFQNGHAQ	LMTDFEKDVD	LACRSVLNKD	IAACRTATIT	GTLKRPSTPE		
				EKLKLAHAK	GPPTNFNSLP	ANVSKLHLHG	SPRYPGGPLP	DFPNHSLTLK	RDKAPKSSFY		

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Brain-Specific

Angiogenesis

Inhibitor 1

NP_001693.1

MRGQAAAPGP

WMLAPLLL

LLLLRRARA

AAGADAGPG

EPCATLVQK

FFGYFSAAV

P

Homo sapiens

343	5520	Brain-Specific Angiogenesis Inhibitor 2	NM_001703	gcccgcggg agagcgggag cctcggccct cccgcgggct gcagctacct accctgcgcc A	Homo sapiens
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[illegible]

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349	6204	Lysophosphat idic Acid Receptor Edg4	NM_004720	<p> gcccagatgg tcaatcaggg ccagtgtctac tacaacgaga ccatacgctt cttctataac A aacagtggca aagagctcag ctcccactgg cggcccaagg atgtgtcgt ggtggcactg gggctgaccg tcagcgtgct ggtgtgctg accaatctgc tggctcagc agccatcgcc tccaaaccgc gcttcaccca gccatctac tactgtctg gcaatctggc cggcgtgac ctcttcgagg gctgggcta cctctctc cttgcccaga ctggtcccc cagagccga ctttcactg agggctggtt cctgcggcag ggctgtctg acacaagcct cactgctg gtggccacac tgcaggccat cgcgtggag cggcaccgca gtgtatggc cgtgcagctg cacagccgcc tgcccgtgg ccgctgggtc atgctcattg tggcgtgtg ggtggctgccc ctgggctggg ggtgtgccc tgcccactc tggcactgct tctgtgccc ggaacgtg tcacgcattg caccctgct cagcgtctc tattggccc tctgggctc tgcagcctg cttgtcttcc tgctcatggt ggctgtgtac acccgattt tctctacgt gcggcgcca gtgcagcgca tggcagagca tgtcagctg caccocgct accgagagac cagctcagc </p>	Homo sapiens

350	6204	Lysophosphat idic Acid Receptor Edg4	NP_004711.2	caaccaacag gaactgactg ctggtcaaga ctgttgtcat catcctgggg gcgttcgtgg tctgtggac accaggccag gtgttactgc tctgtgatgg tttaggtgtg gagtgactga tacttctac tggtggccga ggccaactca ctgttcaatg ctgtctgtga tgccgcgcac cttccgcgc cttctctgtg gcgctgtgct ccgcagctcc accggaggt ctgtccacta tacctctct gccaggggag gtgccagcac tcgcatcatg cttcccgaga acggccaccc actgatggac tccaccttt agctaccttg aacttcagcg gtacggcgca agcaacaat ccacagcccc tgatgactg tgggtgctcc tggtcaacc	Homo sapiens
351	6213	C-C Chemokine Receptor 5	NM_000579	cttcagatag attatattctg gagtgaagga tccctgccac tacgtattctg gcatagtatt A ctgtgtagtg ggatgagcag agaacaaaa caaatataatc cagtgagaaa agcccgtaaa taaaccttca gaccagagat ctattctcca gcttatttta agctcaactt aaaaagaaga actgttctct gattcttttc gccctcaata cacttaata gttataatga tttaactcca ccctcttcca aaagaaacag catttctctac ttttatactg tctatatgat tgatttgac agctcatctg gccagaagag ctgagacatc cgttccocta caagaactct tcccggggtg gaacaagatg gattatcaag tgtcaagtcc aatctatgac atcaattatt atacatcgga gccctgccaa aaaatcaatg tgaagcaaat cgacgcccgc ctcctgcctc cgctctactc actggtgttc atctttggtt ttgtggcaa catgctggtc atcctcatcc tgataaactg caaaaggctg aagagcatga ctgacatcta cctgctcaac ctggccatct ctgacctgtt tttccctctt actgtccct tctgggctca ctatgctgcc gccagtgagg actttggaaa tacaatgtg caactcttga cagggtctta ttttataggc ttctctctctg gaatctctt catcatcctc ctgacaatcg ataggtaact ggctgtctgc catgctgtgt ttgcttttaa agccaggacg gtcacctttg gggtgtgac aagtgtgac acttgggtgg tggctgtgtt tgctctctc ccaggaaatca tctttaccag atctcaaaa gaaggtcttc attacacctg cagctctcat tttccataca gtcagtatca attctggaag aatttccaga cattaaagat agtcactttg gggctgtccc tgccgctgct tgtcatggtc atctgtact cgggaatcct aaaaactctg cttcggtgtc gaaatgagaa gaagaggcac agggctgtga ggcttatctt caccatcatg attgtttatt ttctctctg ggctccctac aacattgtcc ttctctgaa caccttccag gaattctttg gctgaataa ttgcagtagc tctaacaggt tggaccaagc tatgcagggtg acagagactc ttgggatgac gcactgtgc atcaacccca tcactatgc ctttgtcggg gagaagtcca gaaactacct cttagtcttc ttccaaaagc acattgcca acgcttctgc aaatgctgtt ctattttcca gcaagaggct cccgaagcag caagctcagt ttacacccga tccactgggg agcaggaaat atctgtgggc ttgtgacacg gactcaagtg ggctgtgac ccagtcagag ttgtgcacat ggcttagttt tcatacacag cctgggctgg gggtgggggtg ggagaggtct tttttaaaag gaagttactg ttatagaggg tctaagattc atccatttat ttggcatctg tttaagtag attagatctt ttaagcccat caattataga aagccaaatc	Homo sapiens

352	6213	C-C	Chemokine Receptor 5	NP_000570.1	<p> aaaaatgtt gatgaaaaat agcaaccttt ttatctcccc ttacatgca tcaagttatt gacaaactct cccctcactc cgaaggttcc ttatgtatat ttaaagaaa gcctcagaga attgttgatt cttgagttta gtgatctgaa cagaaatacc aaaaattatt cagaaatgta caacttttta cctagtacaa ggcaacatat aggttgtaaa tgtgtttaaa acaggtcttt gtcttgctat ggggagaaaa gacatgaata tgattagtaa agaatgaca ctttcatgt gtgatttccc ctccaaggta tggtaataa gtttcaactg cttagaacca ggcgagagac ttgtggcctg ggagagctgg ggaagcttct taaatgagaa ggaatttgag ttggatcacc tattgtggc aaagacagaa gcctcactgc aagcaactga tgggcaagct tggctgtaga aggagacaga gctgtgttggg agacatggg gaggaaggac aagctctagat catgaagaac cttgacggca ttgtccctg taagtcatga gctgagcagg gagatcctgg ttgtgttgc agaaggttta ctctgtggc aaaggagggt caggagaggt gagcatttag ggcaaggaga ccaccaacag cccctcaggtc aggtgagga tggcctctgc taagctcaag gcgtgaggat gggaaggagg gaggtattcg taaggatggg aaggaggagg gtattctgtc agcatatgag gatgcagagt cagcagaact ggggtgtgatt tggtttggaa gtgaggtga gagaggagtc agagagatc cctagtcttc aagcagattg gagaaacctt tgaagaaga tcaagcacag aaggaggagg aggaggttta ggtcaagaag aagatggatt ggtgtaaaa gatgggtctg gtttgcagag cttgaacaca gtctcaccga gactccaggc tgtcttccac tgaatgcttc tgacttcata gatttctctt ccattccagc tgaataactg aggggtctcc aggagagac tagatttatg aatacacgag gtatgaggtc taggaacata cttcagctca cacatgagat ctaggtgagg attgattacc tagtagtcat ttcatgggtt gttggagga ttctatgagg caaccacagg cagcatttag cacatactac acattcaata agcatcaaac tcttagttac tcattcaggg atagactga gcaagcatt gagcaagggt gtcccatata ggtgagggaa gcctgaaaaa ctaagatgct gcctgccag tgcacacaag ttaggtatc atttctgca tttaaccgtc ataggcaaa ggggggaagg gacatattca ttggaaaaa agctgccttg agccttaaaa' ccacaaaaa tacaatttac cagctccctg attcagact gaatgggggt gggggggggc ccttaggtac ttattccaga tgcctctccc agacaacca gaagcaacag aaaaaatcgt ctctccctcc ctttgaatg aatatacccc ttagtgttg ggtatattca ttccaaaggg agagagagag gttttttctt gttctttctc atatgattgt gcacatactt gagactgttt tgaatttggg ggatggctaa aaccatcata gtacaggtaa ggtgagggaa tagtaagtgg tgagaactac tcagggaatg aaggtgtcag aataataaga ggtgtactg actttctcag cctctgaata tgaacgtga gcatttggc gtgcagcagg aagcaacgaa gggaaatgct ttctcttttg ctcttaagt gtggagagt caacagtagc ataggacct accctctggg ccaagtcaaa gacattctga catcttagta ttgcatatt cttatgtatg tgaaggttac aaattgcttg aaagaaaaa tgcattctaatt aaaaaacac ttcta LKSMDSPIY DINYTSEPC QKINVKQIAA RLPPYLSLV FIFGVGNML VILIINCKR P LLTIDRYLAV VHAVALKAR TVTFGVVTSV ITWVAVFAS LPGLIITRSQ KEGLHYTCSS HFPYSQOFW KNFTLKIVI LGLVPLLM VICYGLIKT LLRCRNEKKR HRAVLIIFTI MIVYFLWAP YNIVLLNTF QEFFGLNCS SSRLDQAMQ VTETLGMTHC CINPIIYAFV GEKFRNYLLV FFQKHIARKF CKCCSIFQOE APERASSVYT RSTGEQEISV GL </p>	Homo sapiens
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353	6363	Chemokine (C-C motif) Receptor- like 2 (CCR2)	NM_0039565	<p>tcctgctctg ggaagtggg cacaggttaa aagaatgtt tattcagtc ttctgaaata A</p> <p>gggaattact ctggtataaa tgtagctcca gaagggaag gtgggctgt atgaatccag</p> <p>gtccagtttg tgtttctctc caggataaag cagctgtcgg aggggaaat catctcccat</p> <p>ttctccacag ggcagctctg agatggccaa ttacacgttg gcaccagag atgaatatga</p> <p>tgtctcata gaagtgaac tggagagcga tggagcag caatgtgaca agtatgacgc</p> <p>ccaggcactc tcagccacg tgggtccatc actctgctct gctgtgtttg tgatcggtgt</p> <p>cctggacaat ctctggttg tgcttatcct ggtaaatat aaggaactca aacgcgtgga</p> <p>aaatatctat ctctaaact tggcagtttc taacttgtt ttctgtctta cctggccctt</p> <p>ctgggtcat gctggggcg atcccatgtg taaattctc attgactgt acttctggg</p> <p>cctgtacagt gagacatttt tcaattgctt tctgactgtg caaaggtacc tagtgtttt</p> <p>gcacaaggc aactttttct cagccaggag gagggtgcc tgtggcatca ttacaagtgt</p> <p>cctggcatgg gtaacagcca ttctggccc ttgtcctgaa tacgtgtgtt ataaacctca</p> <p>gatggaagac cagaaataca agtgtgcat tagcagaact ccttctctgc cagctgatga</p> <p>gacattcttg aagcattttc tgactttaa atgaacatt tcgttctctg tctccccct</p> <p>attattttt acatttctct atgtgcaaat gagaataca ctaagtttca gggagcagag</p> <p>gtatagcctt ttcaagcttg ttttgccat aatggtagt ttcttctga tggggcgcc</p> <p>ctacaattt gcatttttcc tgtccactt caaagaacac ttctcctga gtgactgcaa</p> <p>gagcagctac aatctggaca aaagtgttca catcataaa ctcatcgcca cccccactg</p> <p>ctgcataaac cctctctgt atgcgtttct tgatgggaca tttagcaaat acctctgccg</p> <p>ctgtttccat ctgcgtagta acaccact tcaaccagg gggcagctgt cacaaggcac</p> <p>atcgagggaa gaacctgacc attccaccg agtgaatac agcatccacc aaatgcaaga</p> <p>agaataaaca tggattttca tctttctgca ttatttcatg taaatttct acacatttgt</p> <p>atacaaatc ggatacagga agaaaggga gaggtgagct aacatttgt aagcactgaa</p> <p>tttgtctcag gcacgtgca aggtcttcta caaagtgag ctctctgcc tctaccact</p> <p>tgctccatagt tggatagga ctagtctcat ttctctgaga agaaactaa ggcgggaaa</p> <p>tttgtctaag atcacataac taggaagtgg cagaactgat tctccagccc tggtagcatt</p> <p>tgctcagagc ctacgtttgg tccagaacat caactccaa acctggggg caaacgacat</p> <p>gaaataaatg tattttaaaa catct</p>	Homo sapiens
354	6363	Chemokine (C-C motif) Receptor- like 2 (CCR2)	NP_003956.1	<p>LILVYKGLK RVENIYLNL AVSNLCFLT LPFWAHAGD PMCKTLIGLY FVGLYSETFF</p> <p>NCLLTQRYL VFLHKGFFS ARRRVPCGII TSVLAWVTAI LATLPEYVYV KQMEDQKYK</p> <p>CAFSRTPFLP ADETFWKHFL TLKMNISVLV LPLFTFTLY VQMRKTLRFR EQYSLFKLV</p> <p>FAIMVFLIM WAPYNIAFFL STFKEHFSLS DCKSSYNLDK SVHITKLIAT THCCINPLLY</p> <p>AFLDGTFSKY LCRCFHLRSN TPLQPRQSA QGTSREEPDH STEV</p>	Homo sapiens
355	6446	Pael Receptor (GPR37)	NM_005302	<p>atgcgagccc cgggcgcgt tctgcgccg atgtcgccg tactgttct gctactgtctc A</p> <p>aaggtgtctg cctctctgc cctcggggtc gccctgcgt ccagaaacga aactgtctg</p> <p>ggggagagct gtgcactac agtgatccag cgccgggca gggacgctg gggaccggga</p> <p>aattctgcaa gagacttct gcgagccga gcaccaggg aggagcagg ggcagcggtt</p> <p>cttgcgggac cctctggga cctgcggcg gcccgggcc gtgaccggc tgcagcgaga</p> <p>ggggcgagg cgtcgcgag cggaacccc ggactccaa ccaggccacc tggcccttg</p> <p>aggtggaag gtgctcggg tcaaggagcct tctgaaactt tggggagag gaacccacg</p>	Homo sapiens

356	6446	Pael Receptor (GPR37)	NP_005293.1	<p>gacctccagc tcttcttca gatctcagag gaggaagaga aggttcccag aggcgtctggc atttcgggc gtagccagga gcagagtgtg aagacagtc ccggagccag cgaatctttt tactggccaa ggagagccgg gaaactccag ggtcccacc acaagccct gtccaagacg gccaatggac tggcggggca cgaagggtgg acaattgcac tcccgggccc ggcgtctggc cagaatggat ccttgggtga aggaatccat gagctgggg gtcccggccc gggaacagc acgaacccgc gtgtgagact gaagaacccc ttctaccgc tgaccaggga gtccatgga gcctacgcgg tcaatgtgtc gtccgtggtg atcttcggga ccgggcatcat tggcaacctg gcggtgatgt gcctgtgtg ccacaactac tacatgcgga gcattctcaa ctcctcttg gccaaacctg cttctggga ctttctcatc atctctctt gcctccgct ggtcatcttc cacgagctga ccaagaagt gctgctggag gactctctc gaaatgctt cctgtgcat agaccgttc gaggtcgtt cttctggagt caccacctc acctatgtg cttgtgcat agaccgttc cgtctgcca ccaactaca gatgtactac gaaatgatc aactgttc ctaacaact gccaaacttg ctgttatatg ggtggagct ctattgttag cacttcaga agttgtctc cgccagctga gcaaggagga ttgggggtt agtgccgag ctccggcaga aggtgcatt attaagatct cctctgattt accagacac atctatgtt tagccctcac ctacgacagt gcgagactgt ggtgtgattt tggctgtac tttgtttg ccacgcttt caccatcac tgctcttag tgactggag gaaatccgc aagcagaga agcctgtac ccgagggaat aaacggcaga ttcaactaga gactcagatg aactgtacag tagtgacat gacctttta tatggattt gcattattcc tgaataatc tgcaacattg ttactgccta catgctaca ggggttcac agcagacaat ggacctcctt aatatacat gccagttcct ttgttcttt aagtccttg tcacccagt cctcctttc tgcctctga aaccttcag tcgggacctc atggagtgt gctgctgtg ctgtgaggaa tgcattcaga agtctcaac ggtgaccagt gatgacaatg acaacgagta caccacgga ctcgaactc cgccttcag taccatcgc cgtgaaatgt ccaactttg tctgtcga actcattgt ga</p>	Homo sapiens
357	6536	Putative Neurotransmi tter Receptor (PNR)	NM_003967	<p>NSARDVLRAR APREQGAAF LAGPSWDLPA AGRDPAAGR GAESAAGPP GPTRPPGPW RWKGARGQEP SETLGRGNPT ALQLFLQISE EEEKGPRGAG ISGRSQEQSV KTVPGASDLF YWPRRAGKIQ GSHHKPLSKT ANGLAGHEGW TIALPGRALA QNGSLGEGIH EPGPPRRGNS TNRRRLKNP FYPLTQESYG AYAMCLSV IFGTGIGNL AMVICVCHNY YMRISNSLL ANLAFDPLI IFFCLPLVIF HELTKWLE DFCKIVPYI EVASLGVTTF TLCALCIDRE RAATNVQMY EMIENCSST AKLAVIWGA LLLALPEWL RQLSKEDLGF SGRAPAERCI IKISPDLPDT IYVLALTYDS ARLMWYFGCY FCLPTLFTIT CSLVTARKIR KAEKACTRGN KRQIQLESQM NCTVVALTIL YGFCIIIPENI CNIVTAMAT GVSQQTMDLL NIISQFLFF KSCVTPVLLF CLCKPFSRAF MECCCCCEE CIQKSTVTS DDNDNEYTTE IELSPFSTIR REMSTFASVG THC</p>	Homo sapiens

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358	6536	Putative Neurotransmi- tter Receptor (PNR)	NP_003958.1	<p>MRVFIQGAEEHPAAFCYQVNGSCPTVHTLGIQLVIYLTCAAGMLIIVLGNVFVAFVSP</p> <p>YFKALHTPTN FLLSLALAD MFLGLIVLPL STIRSVESCW FFGDFLCRLH TYLDTLFLCLT</p> <p>SIFHLCFISI DRHCAICDPL LYPSTFTVRV ALRYTLAGWG VPAAYTSLFL YTDVVTREL</p> <p>QWLEMPCVG SCOLLNKFV GWLNFLEFV PCLIMISLYV KIFVATRQA QQITLTKSL</p> <p>AGAAKHERKA AKTLGIWVG IYLLCWLPFTI DTMVDSLHF ITPPLVDFID IFWAFYENSAC</p> <p>NPILYVFSYQ WFRKALKLTL SQKVFSPQTR TVDLXQE</p>	Homo sapiens
359	6777	G Protein- Coupled Receptor TM7SF1	NM_003272	<p>CGGCGGATG CCGGAGACC CCGCGGGGG CCGCGGCGG CGTGAGCCCC GATGAGGGCC A</p> <p>GAGGTCCCC GCGCGCGCG GAGCGCCCC GCGCGATGG AGACCCCGC GTGGGACCCA</p> <p>GCCCGCAAC ACTCGTGCC GCCACGCTG ACCCGGCGG TCCCGCCCTA CGTGAAGCTT</p> <p>GGCTCAACG TCGTCAACG CGTGTCTAC GCGTGTCTC TCGTGTCTC CTACGTGCAG</p> <p>CTCTGGCTG TGCTCGGTTA CCGCCACAAG CGGCTCAGT ACCAGAGCGT CTCTCTCTT</p> <p>CTCTGCCTC TCTGGGCTC CCGCGGACC GTCCTCTCT CTTCTACTT CAAAGACTC</p> <p>GTGGCGGCA ATTGCTCAG CCGCTCGTC TCTGGCTGC TCTACTGCT CCCTGTGTG</p> <p>CTGCAGTTT TCACCTCAC GCTGATGAAC TTGTACTTCA CGCAGGTGAT TTTCAAAGCC</p> <p>AAGTCAAAAT ATTCTCAGA ATTACTCAA TACCGTTGC CCGCTACCT GCGCTCCCTC</p> <p>TTCATCAGC TTGTTTCTT GTTGTGAAT TTAACCTGTG CTGTGCTGGT AAAGACGGGA</p> <p>AATTGGGAGA GGAAGTTAT CGTCTCTGTG CGAGTGGCCA TTAATGACAC GCTCTCTGTG</p> <p>CTGTGTGCG TCTCTCTC CATCTGCTC TACAAATCT CTAAGATGTC CTTAGCCAAC</p> <p>ATTACTTGG AGTCAAGGG CTCTCGGTG TGTCAAGTGA CTGCCATCGG TGTCAACGTG</p> <p>ATACTGCTT ACACCTCTG GCGCTGTAC AACCTGTCA TCCTGTCATT TTCTCAGAAC</p> <p>AAGAGCTCC ATTCTTTGA TTATGACTG TACAATGTAT CAGACCAAGC AGATTGAAG</p> <p>AATCAGCTG GAGATGCTG ATACGATTA TTGGAGTGG TGTATTGTT TGGGAACCT</p> <p>TTACCTACA CTTAGTCTG TTATTCTTC CGAGTAGAA ATCTACAAA GGACCTTACC</p> <p>AACCTGGAA TGGTCCCGC CCGATGATC AGTCCAGAT CTTATTCTT TGACAACCT</p> <p>CGAAGATATG ACAGTGATGA TGACCTGCC TGGAACTGG CCGCTCAGG ACTTCAGGGA</p> <p>GGTTTGTCT CAGATTACTA TGATTGGGGA CAACAACCTA ACAGCTCTCT GGCACAAGCA</p> <p>GGAACTTTC AAGACTCAAC TTGGATCCT GACAAACCTA GCCTGGGTA GCATCAGTA</p> <p>ACAGTTTAT GGACGATTC TCAGATGAA AGCTTCAGAA AAGCATAGT ACAGTGAAT</p> <p>TTTTAGGGA CTTTCTCTA AGAAATAGAA CTTGATTTT ATTGTTACA GGTTCGAAT</p> <p>GGCCCCATAG GAATAAGCAA TAATGTAGAC TGATAAACC TTATTAGT ACTAAAGAGG</p>	Homo sapiens

360	6777	G Protein- Coupled Receptor TM7SF1	NP_003263.1	MRPERPRRG SAPGNETPP YVQLWLVLR RHKRLSYQSV FLFLCLFWAS LRTVLFSEFY KDFVAANSLS PFVFWLLYCF PVCLOFETLT LMNLYFTQVI FKAKSKYSPE LLKYRLPLYL ASLFLSLVFL LWNLTCAVLV KTGNWERKVI VSVRVAINDT LFVLCVSVLS ICLYIKSKMS LANIYLESKG SSVQCQVTAIG VTVILLYTSR ACYNLFIISF SQNKSVHSFD YDWYVSDQA DLKNQLGDAG YVLFQVWLFV WELLPTTLV YFFRVRNPTK DLTNPGMVPS HGFSPRSYFF DNPRRYDSD DLAWNIAPOG LQGGFAPDYY DWGQQTNSFL AQAGTILQDST LDPDKPSLG	Homo sapiens
361	6853	Purinergic Receptor P2Y11	NM_002566	atggatcgag gtgccaagtc ctgcccctgcc aactctctgg cagctgcccga cgacaaactc A agtgggtcc aggggactt cctgtggccc atactgttg ttgagttccct ggtggccgtg gccagcaatg gccctggcctt gtaccgcttc agcatccgga agcagcgccc atggcacccc gccgtggctc tctctgtcca gtcggcagtc agcagccctg ctcgcgtctc cagctgccc atggggaggg cgcgtgccc ctgtggagct tccctttcac ctgcaacctg ctgggcagcg tcattctcat cactctgcat agcctcaacc gctacctggg catcgtgcac cctctcttcg cccgaagcca cctgggaccc aagcaagcct gggcgtgag cgctgcggc tgggtccctg ccgcctctgt ggccatgccc acactcagct tctccacct gaagagggcg cagcaggggg cgggcaactg cagctggcc aggcccgagg cctgcacaa gtgtctgggg acagcagacc acgggctggc gccctacaga gcgtatagcc tgggtctggc ggggttgggc tgcggcctgc cgctgctgtc cagctgtgga cgcagccagg cctcggggcg ggccgtgcta cgcagcccg gcctgactgt gtcgagaaag ctgcgttggt ggcagtggt gtggccctct acgcagctc ctatgtgccc taccacatca tgcgggtgct caacgtggat gctcggcggc gctggggcgg cgcgtggcga cgcgtggcga agctttgcag acatagccca ggccacagca gccctggagc tggggcccta cgtgggctac caggtgatgc ggggacctat gccctggccc tctgtgtcc acctctact ctacatggcc gcagtggcca gccctgggctg ctgtgcccga cactgccccg gctacaggga cagctgggaa ccagagggac ccaagagcac tggccaagcc ctgcccctca atgccacagc cgcccctaaa ccgtcagagc cccagtcctg tgagctgagc caatga	Homo sapiens
362	6853	Purinergic Receptor P2Y11	NP_002557.1	MDRGAQSCPA NFLAAADDKL SGFQGDFLWP ILVVEFLVAV ASNGIALYRF SIRQRPWHP P AVVESVQLAV SDLLCALTLR PLAAYLYPPK HWRYGBAAR LERLFTCNL LGSVTFITCI SINRYLGIVH PFFARSHLRP KHAWVSAAG WVLALLAMP TLSEFHLKRP QQGAGNCSVA RPEACIKCLG TADHGLAAYR AYSLVLALG CGLPLILLTA AYGALGRAVL RSPGMTVAEK LRVAALVAG VALYASSYVP YHIMRVLNVD ARRWSTRCP SFADIAQATA ALELGPYVGY	Homo sapiens

363	6921	G Protein- Coupled Receptor GPR39	NM_001508	QVMRGLMPLA FCVHPLLYMA AVPSLGCCCR HCPGYRDSWN PEDAKSTGQA LPLNATAAPK PSEPQSRRLS Q atggtctcac ccagctctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccgagtttg aggtggccac ctggatcaaa atcacctta ttctggtgta cctgatcatc ttcgtgatgg gccttctggg gaacagcgcc accattcggg tcaccagagt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctcgacatc ttggtgttcc tcatcgcat gcccatggag ttctacagca tcacttgaa tccctgacc acgtccagct acacctgtc tgcgaagtg cacactttcc tcttcgagge ctgcagctac gtacagctgc tgcacgtgct gacactcagc tttagcgct acatgccat ctgtcacccc ttcaggtaaa aggtgtgtc gggaccttg caggtgaagc tgctgattgg cttegtctgg gtcacctccg ccttggtggc actgaccttg ctggttgcca tgggtactga gtacccctg gtgaacgtgc ccagccaccg ggtgtcact tgcaaccgt ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaactct ccagccgctg gacctgttc cagtcacaga tcttcggcgc ctctcgtgc tacctcgtgg tctgctctc cgtagccttc atgtcctgga acatgatga ggtgctcatg aaagccaga aggcctcgt gcccgggggc acggggctc cgcagctgag gaagtcgag agcgaagaga gcagaccgc caggaggcag accatcatc tctgaggtg gattgtgtg acattggcg tatgtggat gcccaaccag attcgagga tcatgctgc ggcaaaccc aagcagact ggacgagtc ctacttcgg gcgtacatga tctctctccc ctctcggag acgttttct acccagctc ggtcatcaac cgcctcctgt acacggtgc ctgcagcag tcttcggcgg tgttcgtgca ggtcgtgtg tgccgctgt cgtgcagca cgccaaccac gagaagcgc tgcgctaca tgcgcactc accacgaca gcgcgcctt tgtgcagcg ccgtgtctct tcggtctccg gcgccagtcc totgcaagga gaactgagaa gattttctta agcatttcc agagcagge cgagccccc tctaagtcct agtcattgag tctcagatca ctacagccca actcagggcg gaaaccagcc aatctcgtc cagagaatgg ttttcaggag catgaagttt ga NP_001499.1 MASPSLPGSD CSQIIDHSV PEFEVATWIK ITLILVYLI FVGLLGNSA TIRVTQVLQK P KGYLQKEVTD HNVSLACSDI LVFLIGPME FYSIIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHVLTL FERYIATCP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHE QPETSNSIC TNLSSRWTF QSSIFGAFV YLVLLSVAF MCWNMQVIM KSQKSLAGG TRPQLRKSE SEESRTARRQ TIIFRLIV TLAVCWPNQ IRRIIMAAKP KHDWTRSYFR AYMLLPFSE TFFYLSVIN PLYTVSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSAREVQR PLLFASRRQS SARTEKIFL STFQSEAEPO SKSQSLSLES LEPNSGAKPA NSAAENGFOE HEV NM_003857 ggacaggtgc cccggagct tccgctcgc gaagacccag acggctgcag gagccgggc A agcctcgggg tcagcgacac catgaacgtc tcgggtgccc caggggcccg gaacggagc caggcgggcg gcgggggagg ctggacccc gagcggtca tcgtgccct gctctcgcg ctcatcttcc tctgggacac cgtgggcaac acgtggtgc tggcggtgct gctgcgcgc ggccagcgcg tcagcactac caactgttc atcctaacc tggcggtggc cgactgtgt ttcatctgt gctgcgtgcc ctccagccc accatata cctggacgg ctgggtgttc ggctcgtgc tgtgcaagg ggtgcacttc ctcatctcc tcaccatga cggcagcagc ttcacgctgg ccgcgtctc cctggacagg tatctggca tccgtaccc gctgcactcc	Homo sapiens
364	6921	G Protein- Coupled Receptor GPR39	NP_001499.1	atggtctcac ccagctctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccgagtttg aggtggccac ctggatcaaa atcacctta ttctggtgta cctgatcatc ttcgtgatgg gccttctggg gaacagcgcc accattcggg tcaccagagt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctcgacatc ttggtgttcc tcatcgcat gcccatggag ttctacagca tcacttgaa tccctgacc acgtccagct acacctgtc tgcgaagtg cacactttcc tcttcgagge ctgcagctac gtacagctgc tgcacgtgct gacactcagc tttagcgct acatgccat ctgtcacccc ttcaggtaaa aggtgtgtc gggaccttg caggtgaagc tgctgattgg cttegtctgg gtcacctccg ccttggtggc actgaccttg ctggttgcca tgggtactga gtacccctg gtgaacgtgc ccagccaccg ggtgtcact tgcaaccgt ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaactct ccagccgctg gacctgttc cagtcacaga tcttcggcgc ctctcgtgc tacctcgtgg tctgctctc cgtagccttc atgtcctgga acatgatga ggtgctcatg aaagccaga aggcctcgt gcccgggggc acggggctc cgcagctgag gaagtcgag agcgaagaga gcagaccgc caggaggcag accatcatc tctgaggtg gattgtgtg acattggcg tatgtggat gcccaaccag attcgagga tcatgctgc ggcaaaccc aagcagact ggacgagtc ctacttcgg gcgtacatga tctctctccc ctctcggag acgttttct acccagctc ggtcatcaac cgcctcctgt acacggtgc ctgcagcag tcttcggcgg tgttcgtgca ggtcgtgtg tgccgctgt cgtgcagca cgccaaccac gagaagcgc tgcgctaca tgcgcactc accacgaca gcgcgcctt tgtgcagcg ccgtgtctct tcggtctccg gcgccagtcc totgcaagga gaactgagaa gattttctta agcatttcc agagcagge cgagccccc tctaagtcct agtcattgag tctcagatca ctacagccca actcagggcg gaaaccagcc aatctcgtc cagagaatgg ttttcaggag catgaagttt ga NP_001499.1 MASPSLPGSD CSQIIDHSV PEFEVATWIK ITLILVYLI FVGLLGNSA TIRVTQVLQK P KGYLQKEVTD HNVSLACSDI LVFLIGPME FYSIIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHVLTL FERYIATCP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHE QPETSNSIC TNLSSRWTF QSSIFGAFV YLVLLSVAF MCWNMQVIM KSQKSLAGG TRPQLRKSE SEESRTARRQ TIIFRLIV TLAVCWPNQ IRRIIMAAKP KHDWTRSYFR AYMLLPFSE TFFYLSVIN PLYTVSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSAREVQR PLLFASRRQS SARTEKIFL STFQSEAEPO SKSQSLSLES LEPNSGAKPA NSAAENGFOE HEV NM_003857 ggacaggtgc cccggagct tccgctcgc gaagacccag acggctgcag gagccgggc A agcctcgggg tcagcgacac catgaacgtc tcgggtgccc caggggcccg gaacggagc caggcgggcg gcgggggagg ctggacccc gagcggtca tcgtgccct gctctcgcg ctcatcttcc tctgggacac cgtgggcaac acgtggtgc tggcggtgct gctgcgcgc ggccagcgcg tcagcactac caactgttc atcctaacc tggcggtggc cgactgtgt ttcatctgt gctgcgtgcc ctccagccc accatata cctggacgg ctgggtgttc ggctcgtgc tgtgcaagg ggtgcacttc ctcatctcc tcaccatga cggcagcagc ttcacgctgg ccgcgtctc cctggacagg tatctggca tccgtaccc gctgcactcc	Homo sapiens
365	7221	Galanin Receptor GalR2	NM_003857	atggtctcac ccagctctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccgagtttg aggtggccac ctggatcaaa atcacctta ttctggtgta cctgatcatc ttcgtgatgg gccttctggg gaacagcgcc accattcggg tcaccagagt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctcgacatc ttggtgttcc tcatcgcat gcccatggag ttctacagca tcacttgaa tccctgacc acgtccagct acacctgtc tgcgaagtg cacactttcc tcttcgagge ctgcagctac gtacagctgc tgcacgtgct gacactcagc tttagcgct acatgccat ctgtcacccc ttcaggtaaa aggtgtgtc gggaccttg caggtgaagc tgctgattgg cttegtctgg gtcacctccg ccttggtggc actgaccttg ctggttgcca tgggtactga gtacccctg gtgaacgtgc ccagccaccg ggtgtcact tgcaaccgt ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaactct ccagccgctg gacctgttc cagtcacaga tcttcggcgc ctctcgtgc tacctcgtgg tctgctctc cgtagccttc atgtcctgga acatgatga ggtgctcatg aaagccaga aggcctcgt gcccgggggc acggggctc cgcagctgag gaagtcgag agcgaagaga gcagaccgc caggaggcag accatcatc tctgaggtg gattgtgtg acattggcg tatgtggat gcccaaccag attcgagga tcatgctgc ggcaaaccc aagcagact ggacgagtc ctacttcgg gcgtacatga tctctctccc ctctcggag acgttttct acccagctc ggtcatcaac cgcctcctgt acacggtgc ctgcagcag tcttcggcgg tgttcgtgca ggtcgtgtg tgccgctgt cgtgcagca cgccaaccac gagaagcgc tgcgctaca tgcgcactc accacgaca gcgcgcctt tgtgcagcg ccgtgtctct tcggtctccg gcgccagtcc totgcaagga gaactgagaa gattttctta agcatttcc agagcagge cgagccccc tctaagtcct agtcattgag tctcagatca ctacagccca actcagggcg gaaaccagcc aatctcgtc cagagaatgg ttttcaggag catgaagttt ga NP_001499.1 MASPSLPGSD CSQIIDHSV PEFEVATWIK ITLILVYLI FVGLLGNSA TIRVTQVLQK P KGYLQKEVTD HNVSLACSDI LVFLIGPME FYSIIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHVLTL FERYIATCP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHE QPETSNSIC TNLSSRWTF QSSIFGAFV YLVLLSVAF MCWNMQVIM KSQKSLAGG TRPQLRKSE SEESRTARRQ TIIFRLIV TLAVCWPNQ IRRIIMAAKP KHDWTRSYFR AYMLLPFSE TFFYLSVIN PLYTVSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSAREVQR PLLFASRRQS SARTEKIFL STFQSEAEPO SKSQSLSLES LEPNSGAKPA NSAAENGFOE HEV NM_003857 ggacaggtgc cccggagct tccgctcgc gaagacccag acggctgcag gagccgggc A agcctcgggg tcagcgacac catgaacgtc tcgggtgccc caggggcccg gaacggagc caggcgggcg gcgggggagg ctggacccc gagcggtca tcgtgccct gctctcgcg ctcatcttcc tctgggacac cgtgggcaac acgtggtgc tggcggtgct gctgcgcgc ggccagcgcg tcagcactac caactgttc atcctaacc tggcggtggc cgactgtgt ttcatctgt gctgcgtgcc ctccagccc accatata cctggacgg ctgggtgttc ggctcgtgc tgtgcaagg ggtgcacttc ctcatctcc tcaccatga cggcagcagc ttcacgctgg ccgcgtctc cctggacagg tatctggca tccgtaccc gctgcactcc	Homo sapiens

366	7221	Galanin Receptor GalR2	NP_003848.1	MNVSGCPGAG NASQACAGGT tggagtcatt gtgggggacg cgtggggcgv LNFILNLGVA DLFCILCCVP FQATYITLDG WVFGLSLCKA VHFILFLVNH LRGQAVSTT P LDRLAIRPY LHSRELRTPR NALAAGLIW GLSLFLSGPY LSYRQSQLA NLTVCHPAMS APRRAMDIC TFVFSYLLPV LVLGITYART LRYLWRAVDP VAAGSGARRA KRKVRMTLLI VAALFCLCWM PHHALILCVW FQGFPLTRAT YALRLILSHLV SYANSCVNPI VVALVSKHFR KGFRITICAGL LGRAPGRASG RVCAARAGTH SGSVLERESS DLLHMSAAG ALRCPGASQ PCILEPCGP SWQGPXAGDS ILTVDA
367	7246	Orexin Receptor 1	NM_001525	cctcccttca ggaagttdga ggctgagacc cgaagaagacc tgggtgtcaa g cctccaggga ccttcccttca agtggtctga agtggtggcc aagctccctc ctctccctct gtgagacct ggatgcccc ctgctgacgc ggctcctgag ctcatggagc cctagaccac cccagggggc cagatggggg tcccccttg cagcagagag cgtccccctg tgcctccaga ctatgaagat gagttctcc gctatgtgtg gctgattat ccttacccaa aacacatga gtgggtcttc atcagagcct atgtgctgt gtctgtctg ccctgggtg gcaacagctt gactgcttc gccgtgtgc ggaaccacca catgaggaca gtcaccaact acttcattgt caactgtcc ctggctgacg ttctggtgac tgcctctgc aggtcatcc cctatctaca ggctgtgtcc gagtcctggc tgttcggcca tggcctctgc aagtcaccc atgcctctg accgtggga tgcctatcgc gtgtcagtg cagtgctaac tctcagcttc atgcctctg cgggccctg gctccatcc tgggcatctg caccactat tgttcaagag cacagcccg ggcggcccg gctccatcc tgggcatctg gctgtgtgc tggccatcat ggtgccccag gctgacgtca tggaaatgac gactgtgctg cctgagctag ccaacgcgac acggtctctc ctgctctg atgaacgctg ggcagatgac ctctatccca agatctacca cagttgtcttc ttattgtca cctactggc ccaactgggc ctcatggcca tggcctattt ccagatattc cgaagctct gggccgcca gatccccgc accacctcag cactggtg gaaactggaag cgccccctag accactcag ggactggag caggggctga gtggagagcc ccagccccg ggcgcgcctt cctggtctga agtgaagacg atgctgtcac ggaggaagac agccaagatg ctgatgggtg tctgtctggt cttgcctcc tgctacctgc ccactcagcgt cctcaatgct cttaagaggg tgttcgggat gttccgcca gcagtgacc gcgaagctgt ctacgcctgc ttcacttct ccaactggt ggtgtacgccc

270/448

Homo
sapiens

368 7246 Orexin Receptor 1 NP_001516.1 MEPSATPGAQ MGVPFGSREP SPVPPDYDE FLRYLWRDYL YPKQYEWVLI AAYVAVFVA P

LVGNTLVCLA VWRNHMRV TNYFVNLSL ADVLVTALCL PASLLVDITE SWLFGHALCK
 VIPYLQAVSV SVAVLTLSEI ALDRWYAICH PLLFKSTARR ARGSIIGIWA VSLAINVPQA
 AVMECSSVLP ELANRRLFS VODERWADDL YPKIYHSCFF IVTYLAPLGL MAMAYFQIFR
 KLWGRQIPGT TSALVRNWK RPSDLGLDLQ GLSGEPQPRG RAFLAEVKQM RARRKTAKML
 MVLLVFALC YLPISVLNVL KRVFGMERQA SDREAVYACF TFSHWLVYAN SAANPIIYNE
 LSGKFRQFK AAFSCCLPGL GPCGSLKAPS PRSSASHKSL SLQSRCSISK ISEHVVLTSV
 TTVLP

Homo
sapiens

369 7247 Orexin Receptor 2 NM_001526

gggggggggg taattgagct tcagctgagc cggacgtagc ttctctctcc tgggtgctatt A
 gctgcagcct ccagtgcgg gtccttagtt cctcagctgc ctattctccc ggtgcacat
 cgcctgtaa gacagcaaa ccaccgaga agttgccgg cagaagactc cggaggcatt
 ggctcagtaa cttttcagct cttttctgc tcgggagccc cttctagcct ctccggcgag
 cctttccac cgcataatcac cagtgtcat ggggcaggcg gagaggactc tgcagcattg
 agcggaaacg gacttgagcc cgtgatgcc ggacacaaa tggaggactc cccccctgt
 cgcaactggt catctgctc ggagctgaat gaaactcaag agccctttt aaacccaccc
 gactatgacg acgaggaatt cctgcggtac ctgtggaggg aatacctgca cccgaagaa
 tatgagtggg tcttgatcgc cgggtacatc atcgtgttcg tctgtgctct cattgggaac
 gtccctggtt gtgtggcagt gtggaagaac caccacatga ggacggtaac caactacttc
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 tctgtggata tcaatgagac ctgggttttt ggacagtccc ttgcaaaagt gattccttat
 ctacagaccg tctcgggtgc tgtgtctgtc ctacacatga gctgtatcgc cttggatcgg
 tggatgcaa tctgtcacc ttgtatgtt aagagcacag caaagcgggc ccgtaacagc
 attgtcata tctggattgt cctcgtcatt ataatgattc ctacaggccat cgtcatggag
 tgcagcaccc tgttccacgg cttagccaat aaacccccc tctttacggt gtgtgatgag
 cgtctgggtg gtgaaattta tcccaagatg taccacatct gtttctttct ggtgacatac
 atggcaccac tgtgtctcat tctgttggtt tatctgcaaa tatttcgcaa acctgtgtgt
 cgaagatcc ctgggaacatc atctgtagt cagagaaaaa ggaagcccc gcagcctgtt
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 ataaagcaga tccgagccag agggaaaaa gcccgatgt tgaatgtgt gcttttggta
 ttgtcaattt gctatctacc aattagcatc ctcaatgtgc taaagagagt atttggatg
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 gtatatgca atagtgtgc gaatccaatt attataaatt ttctcagtgg aaaatttcga
 gaggaattta agctgctgt ttctgtgtg tgccttgag ttccaccatc ccaggaggat
 cggctacca ggggacgaac tagcacagag agccggaagt ccttgaccac tcaatcagc

370	7247	Orexin Receptor 2	NP_001517.1	MSGTKLEDSP PCRNWSASE LNETQEPFLN KNHMRVTN YFIVNLSD VLVTTCLPA TLVVDITETW YIIVFVALI GNVLCVAVM SVLTLSIAL DRWYAICHPL MFKSTAKRAR NSIVIIWVS FFGQSLCKVI PYLQTVSVSV ANKTTLETVV DERWGGIYTP KMYHICFFLV TYMAPLCLMV CIIMIPQAIIV MECSTVEPGL WCRQIPGTSS VVQRWKPLQ PVSQPRGPQ PTKSRMSAVA AEIKQIRARR LAYLQIFRKL WCRQIPGTSS VVQRWKPLQ PVSQPRGPQ PTKSRMSAVA AEIKQIRARR KTARMLMWL LVFAICYLPI SILNLKRVF GMFAHTEDRE TVYAMFTFSH WLVSANSAAN PIIYNFLSGK FREEFKAAFS CCCLGVHHRQ EDRLTRGRTS TESRKSILTTQ ISNFDNISKL SEQVLTSLIS TLPANGAGP LQNW	Homo sapiens
371	8436	Platelet- Activating Factor Receptor	NM_000952	ccagctgata ttccagccca cagcaatgga gccacatgac tcctccaca tggactctga A gttccgatac actctcttcc cgattgttta cagcabcatac tttgtgctcg gggteattgc taatggctac gtgctgtggg tctttgccc cctgtaccct tgcaagaaat tcaatgagat aaagatcttc atggtgaacc tcaccatggc ggacatgctc tcttgatca ccttgccact ttggattgtc tactacaaa accaggggcaa ctggatactc cccaaattcc tgtgeaacgt ggctggctgc cttttcttca tcaacaccta ctgctctgtg gccttctg gcgtcatcac ttataacgc ttccaggcag taactggcc catcaagact gctcaggcca acaccgcaa ggctggcactc ttttctctc ttgctatctg ggtggccatt ggtggagctg catctactt cctcatctg gactctacca acacagtgcc gcacagtgct ggctcaggca acgtcactcg ctgctttgag cattaacaga agggcagcgt gccagtcctc atcatccaca tcttcactgt gttcagctc ttcctggtct tcctcatcat cctcttctg aacctgtca tcatcctgac cttgctcatg cagccgtgc agcagcagc caacgtgaa gtcaagcgcc gggcgctgtg gatggtgc acggtcttg cggtgttcat catctgctc gtgcccacc acgtggtgca gctgcccctgg acccttgctg agctggctt ccaggacagc aaattccacc aggcattaa tgatgcacat caggtcacc tctgctcct tagaccaac tgtgtcttag accctgttat ctactgttc ctcaccaaga agttccgcaa gcacctcacc gaaaagtctc acagcatgcg cagtagccgg aaatgctccc gggccaccac ggatacggc actgaagtgg ttgtgccatt caaccagatc cctggcaatt cctcaaaaa ttagtcttg cttc MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLMVF ARLYPKKKFN EIKIFMNLTP P MADMLFLITL PLWIVYQNG GNWILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRQAVT RPIKTAQANT RRRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEYKEG SVPVLIHIF IVFSFFLVFL IILFCNLVII RTLLMQPVQQ QRNAEYKRRRA LMMVCTVLAV FTICFVPHV VOLPWTIAEL GFQDSKFHQA INDAHQVTLIC LLSTNCVLDLP VIYCFLTKEK RKHLTEKFS MRSSRKCSRA TTDVTVEVV PFNQPNSL KN tggggggcgtc ctccttctgc ccgcgccgc tgtcaagctg tgttctagcg gccgaggac A cgaggggggc taagaaaggg ggcgccagc catcgagcg caaaaggcg ctgcggaacg gggtccccgt cggctgctg gaggcaggag ctgcggagcca caagtgggg gctgggaagc aggaccacagc agggcgctc ttggcaggcg ccggggcgag ggccaggctg ctggggacgc	Homo sapiens
372	8436	Platelet- Activating Factor Receptor	NP_000943.1	ccagctgata ttccagccca cagcaatgga gccacatgac tcctccaca tggactctga A gttccgatac actctcttcc cgattgttta cagcabcatac tttgtgctcg gggteattgc taatggctac gtgctgtggg tctttgccc cctgtaccct tgcaagaaat tcaatgagat aaagatcttc atggtgaacc tcaccatggc ggacatgctc tcttgatca ccttgccact ttggattgtc tactacaaa accaggggcaa ctggatactc cccaaattcc tgtgeaacgt ggctggctgc cttttcttca tcaacaccta ctgctctgtg gccttctg gcgtcatcac ttataacgc ttccaggcag taactggcc catcaagact gctcaggcca acaccgcaa ggctggcactc ttttctctc ttgctatctg ggtggccatt ggtggagctg catctactt cctcatctg gactctacca acacagtgcc gcacagtgct ggctcaggca acgtcactcg ctgctttgag cattaacaga agggcagcgt gccagtcctc atcatccaca tcttcactgt gttcagctc ttcctggtct tcctcatcat cctcttctg aacctgtca tcatcctgac cttgctcatg cagccgtgc agcagcagc caacgtgaa gtcaagcgcc gggcgctgtg gatggtgc acggtcttg cggtgttcat catctgctc gtgcccacc acgtggtgca gctgcccctgg acccttgctg agctggctt ccaggacagc aaattccacc aggcattaa tgatgcacat caggtcacc tctgctcct tagaccaac tgtgtcttag accctgttat ctactgttc ctcaccaaga agttccgcaa gcacctcacc gaaaagtctc acagcatgcg cagtagccgg aaatgctccc gggccaccac ggatacggc actgaagtgg ttgtgccatt caaccagatc cctggcaatt cctcaaaaa ttagtcttg cttc MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGYVLMVF ARLYPKKKFN EIKIFMNLTP P MADMLFLITL PLWIVYQNG GNWILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRQAVT RPIKTAQANT RRRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEYKEG SVPVLIHIF IVFSFFLVFL IILFCNLVII RTLLMQPVQQ QRNAEYKRRRA LMMVCTVLAV FTICFVPHV VOLPWTIAEL GFQDSKFHQA INDAHQVTLIC LLSTNCVLDLP VIYCFLTKEK RKHLTEKFS MRSSRKCSRA TTDVTVEVV PFNQPNSL KN tggggggcgtc ctccttctgc ccgcgccgc tgtcaagctg tgttctagcg gccgaggac A cgaggggggc taagaaaggg ggcgccagc catcgagcg caaaaggcg ctgcggaacg gggtccccgt cggctgctg gaggcaggag ctgcggagcca caagtgggg gctgggaagc aggaccacagc agggcgctc ttggcaggcg ccggggcgag ggccaggctg ctggggacgc	Homo sapiens
373	8509	G Protein- Coupled Receptor Is8509	NM_007223	tggggggcgtc ctccttctgc ccgcgccgc tgtcaagctg tgttctagcg gccgaggac A cgaggggggc taagaaaggg ggcgccagc catcgagcg caaaaggcg ctgcggaacg gggtccccgt cggctgctg gaggcaggag ctgcggagcca caagtgggg gctgggaagc aggaccacagc agggcgctc ttggcaggcg ccggggcgag ggccaggctg ctggggacgc	Homo sapiens

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374	8509	G Protein- Coupled Receptor Ls8509	NP_009154.1	taccocatgt gcactttctg aggatgcctc acttcctcgg gctctgcaga gaacacacag agagaagact ttacagagctc acagagcag ggefgeaqly RQFTTQVV IFIGSLGNF P MVLWSTCRIT VKSVNRFI KNLACSGICA SLVCVPFDII LSTSHCCWW IYTMDFCKVV KFLHKVFCV TILSFAIAL DRYSVLYPL ERKISDAKSR ELMVYWAHA VVASVPVEAV TNVADIYATS TCTEWSNSL GHLVVLVYN ITTVIPVVV VFELILIRR ALSASQKKKV IIAALRTPQN TISIPYASQR EAEHLATLS MMVFILCSV PYATLVVYQT VLNVPDTSVF LLLTAVWLPK VSLANPVLIF ITVNSVRKC LIGTLVQLHH RYSRRNVST GSGMAEASLE PSIRSGSOLL EMFHIGQQOI FKPTDEEES EAKYIGSADF QAKEIFSTCL EGEQGPQFAP SAPPLSTVDS VSQVAPAPV EPETFPDKYS LQFGGPFEL PPQWLSETRN SKRLLPPLG NTPEELIQTK VPKVGRVERK MSRNKVSIF PKVDS	Homo sapiens
375	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NM_006173	ttgataggga tagaaacaca ttggctgtct tctatagtta acaagatgct gtacatttcc A ttgcctcact agctctgaag actatactag cgggacaaaag aaagcacctg agatgagctg agaggagggt aaaggtacac agagatcccc tggatatattg ttctatgtcc ttcaggggc tttgtacca ctagagaatt atccatatta agaacttgca ttgatattct ggtttctgtt tcatttttta gggctcgaag agcagctca agtcattcac atgtttccat caaatcacaga cacagatcag ggaagattaa accctactaa ttctcgtcg gatgctcac acaaggtgc cttccaaaga ctaatggcca aaatatccac ccacacaca aataagctta gaaaatctct tcttaaatc ctgacacaaat ggaagtctcc ctacaccacc cagcatctaa tacaaccagc acaaagaaca caaactggc attttttac tttagagtcct gtcaacctcc tctccagct ttactcctat tatgeatagc ctatactgtg gcttaattt tgggaccttt tggaaacctc tctctcatca tcatcatctt taagaagcag agaaagctc agaattttac cagcactactg attgccaatc tctcctctc tgataccttg gtgtgtgtca tgtgcatcca ttttactatc atctacactc tgatggacca ctggatatatt ggggatacca tgtgcagact cacatccat gtgcagagt tctcaatctc tgtgtccata ttctcacttg tattcactgc tgcgaaaga tatcagctaa ttgtgaacc ccgtggctgg aagcccatg tgaactatgc ctactggggc atcacactga ttgtgtgtt ttccttctg ctgtctatc ccttttctt gtcctaccac ctcacatgag agcccttccg caacctctct ctcaccactg acctctacac ccaccaggtg gcctgtgtgg agaactggcc ctccaaaag gaccgctgc tcttaccac ctccttttt ctgtgcagt atttgttcc tctaggcttc atctcatct gctacttgaa gatgtttatc tgcctccga ggagaaatgc aaaggtagat aagaagaagg aaaaagagg ccggtccaat gagaaacaaga ggaatcaacac aatgttgatt tccatcgttg tgacctttgg agcctgtgg ctgccccgaa tatctcaat gtcattcttg actggtatca tgaggtgctg atgactgcc accacgacct ggtatttga gtttgccact tgggtgctat ggtttccaca tgtataaac ctctcttta tggctttctc acaaaaatt tccaaagga cctggtagt cttattcacc actgtgtgtg cttcacacct caggaaagat gtgaaatat tgcactctcc actatgcaca cagactccaa gaggtcttta agattggctc gtataacaac aggtataga aaattgataa tgctgaagct ctcttgaat gggagctgga caggtaatgg tgggaatagg gcaagtatga gaaagaagaa accagaacca aaaatagcaa ctttataccc acttttctt taggctaaga ctgcctgtct catatgtcta tccaacacac cctccaacat acacgaacac acataccacc ccttttctct taagaaaata actctaataa ttcaacaac ctgcccgcga tcatttgtg	Homo sapiens

376	8896	Neuropeptide NP_006164.1 Y Receptor Type 6 Pseudogene	<p>caaaagaatga gaatgagaaa gcagagagag aggcacaacag cagtgatggc tggggaacaa tggtcacaga tacttttatt caatggaata tctacaaag ttatgactaa tgatatgcct agtaaaaca ctgctatacc tccttagcac tgagaat mevslnhpas nttstknns affyescqp pspallllci aytvvlivgl fgnsliliii P fkqkrkaqnf tsilianlsl sdtlvcmci hftiilytldm hwifgdtmcr ltsyvgqsvsi svsifslvft averyqlivm prgwkpsth aywigitliwl fslilisipff lsyhltdpef rnlslptdly thqvacvenw pskkdrllft tsllflqyfv plgfilicyl kiviclrrrn akvdkkene grlnenkrin tmlislvtf gacwlpriiss msslkgimrc cattccacc cttccttctt taataagcag gagcgaacaa gacaaattcc aaagaggatt A gttcagttca agggaaatgaa gaattcagaa taattttggg aactgattcc caatcgcgg aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctaaa ataatctata acaaccaaac caatcaaaat gaattcaaca ttattttccc aggttgaaaa tcattcagtc cactctaatt tctcagagaa gaatgccag cttctggcct ttgaaaaatga tgattgtcat ctgcccttgg ccattgatatt taccttagct cttgcttatg gagctgtgat cattctgggt gtctctggaa acctggcctt gatcataatc atcttgaaac aaagagagat gagaaatggt accaacatcc tgattgtgaa ctttctcttc tcagacttgc ttgttgccat catgtgtctc cctttacat ttgtctacac attaatggac cactgggtct ttgttgaggc gatgtgaag ttgaatcctt ttgtgcaatg tgttcaatc actgtgtcca tttctctct ggttctcatt gctgtggaac gacatcagct gataatcaac cctcgagggt ggagaccaaa taatagacat gcttatgtag gtattgtgtg gattgggtc cttgctgtgg cttctcttt gccttctctg atctaccaag taatgactga tgagcgttc caaaatgtaa cacttgatgc gtacaaagac aaatcgtgt gctttgatca atttccatgc gactctcata ggttgcctta taccactctc ctcttggtgc tgcagtattt tggctcactt tgtttatat ttattgcta cttcaagata tatatacgcc taataaggag aaacaacatg atggacaaga tgagagacaa taagtacagg tccagtgaac ccaaaagaat caatatcatg ctgctctcca ttgtgttagc atttgagtc tctgtgctcc cctttaccat ctttaacact gtgtttgatt ggaatcatca gatcattgct acctgcaacc acaatctgtt attctgctc tgccacctca cagcaatgat atccactgt gtcaaccoca tattttatgg gtctctgaac aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctcgggat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttctttg aagcaagcaa gccagtcgc atttaaaaa atcaacaaca atgatgataa tgaaaaaatc tgaaactact tatagcctat ggtcccgat gacatctgtt taataacaag cacaacctgc aacatacttt gattacctgt tctcccaagg aatggggttg aaatcatttg aaatgacta agattttctt gtcttgcttt ttactgcttt tgtttagtt gtcataatta catttggaac aaaagggtg ggctttggg tcttctgaa atagttttga ccagacatct ttgaagtgtc ttttggaat ttatgcata aatataaga cttttact gtactattg gaatgaatt tcttaaaagt attacgatgc gctgacttca gaagtacctg ccatacaata cggtcattag attgggtcat cttgattaga ttagattaga ttagattgtc aacagattgg gccatcctta ctttatgata ggcatactt tagtgtgtta caatagtaac agtatgaaa agcagattc aggagccgaa agatagctt gaagtcattc agaagtgtt tgaggtttct gtttttgggt gtttttgggt tgtttttt ttttttcacc ttaaggaggg ctttcatttc ctccgactg attgtcactt aaatcaaat</p>	Homo sapiens
377	9421	Neuropeptide nm_000909 Y Receptor Type 1	<p>caaaagaatga gaatgagaaa gcagagagag aggcacaacag cagtgatggc tggggaacaa tggtcacaga tacttttatt caatggaata tctacaaag ttatgactaa tgatatgcct agtaaaaca ctgctatacc tccttagcac tgagaat mevslnhpas nttstknns affyescqp pspallllci aytvvlivgl fgnsliliii P fkqkrkaqnf tsilianlsl sdtlvcmci hftiilytldm hwifgdtmcr ltsyvgqsvsi svsifslvft averyqlivm prgwkpsth aywigitliwl fslilisipff lsyhltdpef rnlslptdly thqvacvenw pskkdrllft tsllflqyfv plgfilicyl kiviclrrrn akvdkkene grlnenkrin tmlislvtf gacwlpriiss msslkgimrc cattccacc cttccttctt taataagcag gagcgaacaa gacaaattcc aaagaggatt A gttcagttca agggaaatgaa gaattcagaa taattttggg aactgattcc caatcgcgg aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctaaa ataatctata acaaccaaac caatcaaaat gaattcaaca ttattttccc aggttgaaaa tcattcagtc cactctaatt tctcagagaa gaatgccag cttctggcct ttgaaaaatga tgattgtcat ctgcccttgg ccattgatatt taccttagct cttgcttatg gagctgtgat cattctgggt gtctctggaa acctggcctt gatcataatc atcttgaaac aaagagagat gagaaatggt accaacatcc tgattgtgaa ctttctcttc tcagacttgc ttgttgccat catgtgtctc cctttacat ttgtctacac attaatggac cactgggtct ttgttgaggc gatgtgaag ttgaatcctt ttgtgcaatg tgttcaatc actgtgtcca tttctctct ggttctcatt gctgtggaac gacatcagct gataatcaac cctcgagggt ggagaccaaa taatagacat gcttatgtag gtattgtgtg gattgggtc cttgctgtgg cttctcttt gccttctctg atctaccaag taatgactga tgagcgttc caaaatgtaa cacttgatgc gtacaaagac aaatcgtgt gctttgatca atttccatgc gactctcata ggttgcctta taccactctc ctcttggtgc tgcagtattt tggctcactt tgtttatat ttattgcta cttcaagata tatatacgcc taataaggag aaacaacatg atggacaaga tgagagacaa taagtacagg tccagtgaac ccaaaagaat caatatcatg ctgctctcca ttgtgttagc atttgagtc tctgtgctcc cctttaccat ctttaacact gtgtttgatt ggaatcatca gatcattgct acctgcaacc acaatctgtt attctgctc tgccacctca cagcaatgat atccactgt gtcaaccoca tattttatgg gtctctgaac aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctcgggat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttctttg aagcaagcaa gccagtcgc atttaaaaa atcaacaaca atgatgataa tgaaaaaatc tgaaactact tatagcctat ggtcccgat gacatctgtt taataacaag cacaacctgc aacatacttt gattacctgt tctcccaagg aatggggttg aaatcatttg aaatgacta agattttctt gtcttgcttt ttactgcttt tgtttagtt gtcataatta catttggaac aaaagggtg ggctttggg tcttctgaa atagttttga ccagacatct ttgaagtgtc ttttggaat ttatgcata aatataaga cttttact gtactattg gaatgaatt tcttaaaagt attacgatgc gctgacttca gaagtacctg ccatacaata cggtcattag attgggtcat cttgattaga ttagattaga ttagattgtc aacagattgg gccatcctta ctttatgata ggcatactt tagtgtgtta caatagtaac agtatgaaa agcagattc aggagccgaa agatagctt gaagtcattc agaagtgtt tgaggtttct gtttttgggt gtttttgggt tgtttttt ttttttcacc ttaaggaggg ctttcatttc ctccgactg attgtcactt aaatcaaat</p>	Homo sapiens

378	9421	Neuropeptide Y Receptor Type 1	NP_000900.1	<p> ttaaaatga ataaaagac atactctca gctgcaata ttatggaga ttgggacccc acaggaatga agagagaaag cagctcccca acttcaaaa catttggtga cctgacaaa agagcatttt agagtaatta atttaataa gtaaatagat attgtgcaa atagtaaat tataattatt tgaattgatg gtcaagatg ttccatttt tttaacagac tttcagtg ttgtcaagct tctgtctaa tatgtactcg aaagacttcc cgctacaat tttagaaaac acaaatatcg ttttccatc agcagtgcct atagtgcac tgatttaac ttcaaatg catctttcaa aggaagtaac accaaggtac aatgttaag gaattttac ttacctagc agggaaaaat acacaaaaac tgcagatact tcatatagcc catttaact tgtataaact gtgtgacttg tggcgtctta taaataatgc actgtaaaaga ttactgaata gttgtgcat gtaaatgac ctaatttcat gtatcttgta atcatgattg agcctcagaa tcatgtggag aaactatatt ttaagaaca agacatactt caatgtatta tacagataaa gtattacatg tgttgattt taaaaggcg gacattttat taaaatcaat attgttttg cttttctga ggagtcctt tcagtttcat ttttctcat cccatgactt cctccgatg gt MNSTLFSQVE NHSVHNSFE KNAQLAFEN DCHLPLAMI FTLALAYGAV IILGVSGLA P LIIILKQKE MRNVTNLIIV NLSEDLIVA IMCLPTFVY TLMDSHVEGE AMCKLNPFVQ CVSITVSIFS IVLIAVERHQ LIINPRGWRP NNRHAYVIGIA VIWVLAVASS LPFLIYQVMT DEPFQNVTLID AYKDKYVCFD QFPDSHRLS YTTLLVLQY FGPLCFIFIC YFKIYIRLKR RNMMDKMRD NKYSSETKR INIMLSIVV AFVWCWLPIT IFNTVFDWNH QIIATCNHNL LFLLCILTAM ISTCVNPIFY GFLKNFQRD LQFFNFCD FRSRDDYETI AMSTMHTDVS RTSLKQASPV AFKKINNNDD NEKI agccgagcga gcccgaggat gggaggcgc cgcagctcc gtctgtcaa ggccttctc A ctctggggc tgaaccccg ctctgcctcc ctccaggacc agcactgcga gagcctgtcc ctggccagca acatctcaga caatggtac cgggagtgcc tggccaatgg cagctgggccc gcccgctga attactcga gtgccaggag atcctcaatg aggaagaaa aagcaagggtg cactaccatg tcgcagtcac catcaactac ctgggcact gtatctccct ggtggccctc ctgggtggcct ttgtctctt tctgcgctc aggaagatcc ggtgctgcg aaacatcac cactggaac tcatctcgc ctctactcg cgcaagcca cctggttcgt ggtccagcta accatgagcc ccgaggtcca ccagagcaac gtgggctggt gcaggttggg gacagccgccc tacaactact tccatgtgac caactcttc tggatgtcg gcgaggctg ctactgcac acagccatcg tgcacacta ctccactgac cggctgcgca aatgatgtt catctgcatt ggctggggtg tgccttccc catcattgtg gccctggcca ttgggaagct gtactacgac aatgagaagt gctggtttgg caaaggcct ggggtgtaca ccgactacat ctaccaggcc cccatgatcc tggctctgct gatcaatttc atcttcttt tcaacatcgt ccgcactctc atgaccaagc tccgggcac caccagctct gagaccattc agtacaggaa ggctgtgaaa gccactctgg tgcgtcgc cctcctgggc atcacatca tgcgttctt cgtcaatccc ggggaggatg aggtctccc ggtcgtcttc atctactca actcttctt ggaatccttc caggcttct ttgtgtctgt gtctactgt ttcctcaata gtgaggtccg tctgscatc cggaagaggt ggcacgggtg gcaggacaag cactgatcc gtgccgagt ggccggtgccc atgtccatcc ccactcccc aaccgtgtc agctttcaaa gcatcaagca gtccacagca gtctga </p>	Homo sapiens
379	9834	Corticotropin releasing factor Receptor 1	NM_004382	<p> agccgagcga gcccgaggat gggaggcgc cgcagctcc gtctgtcaa ggccttctc A ctctggggc tgaaccccg ctctgcctcc ctccaggacc agcactgcga gagcctgtcc ctggccagca acatctcaga caatggtac cgggagtgcc tggccaatgg cagctgggccc gcccgctga attactcga gtgccaggag atcctcaatg aggaagaaa aagcaagggtg cactaccatg tcgcagtcac catcaactac ctgggcact gtatctccct ggtggccctc ctgggtggcct ttgtctctt tctgcgctc aggaagatcc ggtgctgcg aaacatcac cactggaac tcatctcgc ctctactcg cgcaagcca cctggttcgt ggtccagcta accatgagcc ccgaggtcca ccagagcaac gtgggctggt gcaggttggg gacagccgccc tacaactact tccatgtgac caactcttc tggatgtcg gcgaggctg ctactgcac acagccatcg tgcacacta ctccactgac cggctgcgca aatgatgtt catctgcatt ggctggggtg tgccttccc catcattgtg gccctggcca ttgggaagct gtactacgac aatgagaagt gctggtttgg caaaggcct ggggtgtaca ccgactacat ctaccaggcc cccatgatcc tggctctgct gatcaatttc atcttcttt tcaacatcgt ccgcactctc atgaccaagc tccgggcac caccagctct gagaccattc agtacaggaa ggctgtgaaa gccactctgg tgcgtcgc cctcctgggc atcacatca tgcgttctt cgtcaatccc ggggaggatg aggtctccc ggtcgtcttc atctactca actcttctt ggaatccttc caggcttct ttgtgtctgt gtctactgt ttcctcaata gtgaggtccg tctgscatc cggaagaggt ggcacgggtg gcaggacaag cactgatcc gtgccgagt ggccggtgccc atgtccatcc ccactcccc aaccgtgtc agctttcaaa gcatcaagca gtccacagca gtctga </p>	Homo sapiens

380	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	MGHPQLRLV KALLLGLNP VSASLQDQHC ESLSLASNIS DNGYRECLAN GSWAARVNYS P ECQEILNEEK KSKVHVHVAV IINYLGHGIS LVALLVAFVL FLRLRSIRCL RNIIHWNLLIS AFILRNATWF VVQLTMSPEV HQSNWGCRL VTAANYFHV TNFFWMEGEG CYLHTAIVLT YSTDLRKWM FICIGWGVFF PIIVAWAIGK LYDNEKWF GKRPGVYTDY IYQGPMLVL LINFIFLNI VRILMTKLRA STTSETIQR KAVKATIVLL PLLGITVMLF FVNPGEDEV RVVFIYNSF LESFQGFVS VFYCFLNSEV RSAIRKWRH WQDKHSIRAR VARMSIPT PTRVSFHSIK QSTAV	Homo sapiens
381	10457	Frizzled-2	NM_001466	cgagtaagt ttgcaagag gcgcgggag gcgcagccgc agcgaggag cggcggggaa A gaagcgagtt ctcgggttg gggcggggg gggcggggg gccaaggag cgggtggggg gcggcgcca gcatcgccg ccgagcgcc ctgcccgcg tctgctgct gctgctgctg ctgcccgcg cgggcgcgc ccagttccac gggggaag gcatctccat cccggaccac ggcttctgcc agcccatctc catccgctg tgcacggaca tgcctacaa ccagaccatc atgcccacc ttctggcca cagcaaccag gagacgcag gcctagaggt gcaccagttc tatccgctgg tgaagtgca gtgctgccc gaactgcgt tctctctgt ctccatgtac gcaccgctgt gaccgtgct ggaacaggcc atccgcctt gccgtctat ctgtgagcgc gcgcgccag gctcggaag cctcatgaac aagttcggt ttcaaggcc cgagcgctg cgctgcgag acttccgcg ccacggcgc gagcagatct gcgtcgcca gaaccactc gaggacggag ctccgcgct actacacc gcgcgcgc cgggactgca gccgggtgc gggggacc cgggtggccc gggcggggc ggcgtcccc cgcgtaccg cacgtggag cacccttc actgcccgc gctctcaag gtgccatct atctcagta caagttctg ggcagcgtg attgtgtgc gccctcgaa cctgcgcgc cgatggttc catgtcttc tcacaggag agacgctt cgcgccctc tggatctca cctggtcgt cgtgtgctg gttccacct tcttactgt caccacgtac ttggtagaca tgcagcgtt ccgtaccac gagcgcccta tcaatttct gtcgggtgc tacacatgg tgcgtgggc ctacatcgcg ggcttcgtc tcaggagcg cgtggtgtg aacgagcgt tctccaggga cggttaccgc acggtgtgc agggaccaa gaaggaggc tgcacatcc tottcatgat gctctactc ttcagcatgg ccagctccat ctggtgggtc atctgtgc tcacctggt cctggcagcc ggcatgaagt ggggccaga ggccatcgag gccactctc agtactcca cctggcgcc tgggcccgtc cggccgtcaa gaccatccc atcctggcca tgggccagat cgacggcgac ctgctgagcg gctgtgctt cgtaggctc aacagcctg acccgctgc gggcttcgtg ctagcgcgc tcttcgtga cctgttcat ggacgtcct tctcctggc cggcttcgtg tgcctctcc gcatccgac catcatgaag cagcagcca ccaagaccga aaagctggag cggctcatgg tgcgcacgg cgtcttctc cgcgagcact gggagcctc caccatcgtc atcgcttgt actctacga caggccttc cgcgagcact gggagcctc gtgggtgagc cagcactga agagcctgc catccctgc cgggcgact acagccgcg catgtcgccc gacttcacgg tetacatgat caaatacctc atgacgtca tctgtggcat cactcgggc ttctggatct ggtcgggcaa gacgtgcac tctgtggaga agttctacac tgcctcacc aacagccgac acggtgagc caccgttga gggaccccc caggccgga cgcgcggcg cttctctccg ccggtgtgg gcccctaca gactcgtat ttattttt taaataaaa acgacgaaa ccatttcaact tttaggtgc tttttaaaag agaactctct gcccaacacc ccc	Homo sapiens

382	10457	Frizzled-2	NP_001457.1	MRPRSALPRL LLPLLLPAA GPAQFHGEKGISIPDHGFCQ PISIPLCTDI AYNOTIMPNL P LIGHTNOEDAG LEVHQFYPLV KVCQSPELRF FLCSMYAPVC TVLEQAIPPC RSICERARQG CEALMNKFGF QWHERLRCEH FPRHGAEQIC VGQNHSEDEGA PALLITAPPP GLQPCGAGGT GGPGGGGAPP RYATLEHPFH CPRVLKVPY LSXKFLGERS CAAPCEPARP DGSMEFFSQEE TRFARLWILT WSVLCCASTF FTVTYLVDM QRFRYPERPI IFLSGCYTMV SVAYIAGFVL QERVVCNERF SEDGYRTVQ GTKKEGCTIL FMMLYFFSMA SSIWWVILSL TWFLAAGMKW GHEAIEANSQ YFHLAMAVP AVKTITILAM GQIDGDLISG VCFVGLNSLD PLRGFVLAPL FVYLFIGTSF LLAGFVSLFR IRTIMKHDGT KTEKLERLMV RIGVFSVLYT VPATIVIACY FYEQAPEHWH ERSWVSHCK SLAIPCPAHY TPRMSPDFTV YMIKYLMTLI VGITSGFWIW SGKTLHSWRK FYTRLTNSRH GETTV	Homo sapiens
383	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	NM_022571	atggccttac tgggcaagca gcaactcggc gccccctccg cggccggccc acctggcggg A acttctcag cggccacggc ggccgtgctc tccttcagca ccgtggcgac cgcggcgctg gggaacctga gcgacgcaag cggaggcggc acagctgccg ctcccggtgg cggcggcctt ggcgggtccg gggaagcgcg ggagcggg ggccgggtga ggcggccgct aggccggag ggcggcgcg tgcgtgcga cggagctgca gtggcggccc aggcgtcgt cctcctgctc atcttctgc tgcctagcct tggcaactgc gcggtgatgg gggtagattg gaagcacgg cagctccgca cgcgcaccaa cgccttcac ctgtcgctgt ccctatcgga tctgtcacg gcgtgctct gccgcgcgc cgccttctc gacctctcga ctccgcccgg gggctcggcg cctgcgtgc cgcggggggc ctggcgcggc ttctgcggc caagccgctt cttcagctcg tgcttcgga tgcgtacgc tcagcgtggc gctcatctcg ttggaccgtt actgcgctat cgctgcgcg cgcgggagaa gatcgccgc cgcgcgcgc tgcagctgct ggcggcgcc tggtcgacgg ccttggtgct ctcttgccc tgggagctgc tcggggcgcc cgggaactc gcggggggcc agagcttcca cggctgcctc tacggacact ccccgaccc cgcgcagctg ggcgccccct tcagcgtggg gctgggtgtg gccgtgctac tgcgtccct cctgctcctc tgcttctgc actaccacat ctgcaagacg gtgcgctgt cggacgtgcg cgtgcggcgg gtgaacacct acgcgcgcgt gctgcgttct tcagcgaggt gcgcacggcc accaccgtcc tcatcatga	Homo sapiens
384	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	NP_072093.1	MALLGSHSG APSAAGPPGG TSSAATAAVAL SFSTVATAAL GNLSDASGGG TAAAPGGGGL P GGSGAREAG AAVRRPLGPE AAPLLSHGAA VAAQALVLLL IFLLSLINC AMGVIVKHR QLRTVTNAFI LSLSLDLIT ALLCLPAFL DLFTPPGSA PALPAGPWRG FCRPSREFFS CFGIVYAQRG AHLVGPLLR RRPPEKIGR RRALQLLAGA WLTAIGFSLP WELLGAPREL AAGQSFHGCL YNTSPDPAQL GGPFSVGLV ACYLLPFLLI CFCHYHICKT VRLSDVRVRP VNTYARVLRS SARCAREPPS SS	Homo sapiens
385	14198	Interleukin- 8 Receptor B	nm_001557	cattcagaga cagaaggtgg atagacaaat ctccacctc agactggtag gctcctccag A aagccatcag acaggaagat gtgaaaatcc ccagacacta tcccagaatc actaagtggc acctgtcctg ggccaaagtc ccaggacaga cctcattgtt cctctgtggg aatactccc caggagggca tcttgattt ccccttgca acccaggtca gaagtctcat cgtcaaggtt gtttcatctt ttttttctg tctaacagct ctgactacca cccaacttg aggcacagt aagacatcgg tggccactcc aataacagca ggtcacagt gctctctgg aggtgtccta cagggtgaaa gccacgcgc ccagtcagga ttaagtta cctcaaaaat ggaagatttt	Homo sapiens

aacatggaga gtgacagctt tgaagatttc tgaaagggtg aagatctttag taattacagt
tacagtctta cctcgccccc ttbtctacta gatgcgcgcc catgtgaacc agaattccctg
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aaccatatt tgtacacca tattcatagc agcttattca caagaccxaa aaggcagaag
caaccxaat gttcatcaat gaatgaatga atggttaagc aaatgtgat atgtacctaa
cgaagtatcc ttcagcctga aagaggaatg aagtactcat acatgttaca acacggaca
accttgaata ctttatgcta agtgaataa gccagcatc aacagataa tagttatga
ttccacctac atgaggtact gagagtgaac aaattbacag agacagaaa cagaacagt
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atgttttaga tgttgaataa gtctgcaga taaacagttag tgatgttgt accgcaatg
gacttaatgc cactaaattg acacttaaaa atggtttaaa tgggtcaattt tgttatgtat
attttatc aatttaaaaa aaacctgag ccccaaaagg tattttaac accaaggctg
ataaaaccaa ggctagaacc acctgcctat atttttgtt aaatgatttc attcaatc
ttttttttta taaaccattt ttacttgggt gtttat

386	14198	Interleukin- 8 Receptor B	NP_001548.1	MEDFNESDS FEDFWKGEDL SNYSYSTLP PFLDDAPCE PESLEINKYF VVIYALVFL P	Homo sapiens
				LSLLGNLSVM LVILYSRVGR SVTDVYLLNL ALADLLFALT LPIWAASKVN GWIEGTFLECK	
				VVSLKEVNF YSGILLACI SVDRYLAIVH ATRTLTKRY LKFKICLSIW GLSLLALPV	
				LLFRRTVSS NVPACYEDM GNNTANWRML LRILPQSFGE IVPLIMLFC YGFLRTLFLK	
				AHMGGKHRAM RVIFAVLIF LLCWLPYNLV LLADTLMRTQ VIQETCERN HIDRALDATE	
				ILGILHSCIN PLIYAFIGQK FRHGLLKILA IHGLISKDSL PKDSRPSFVG SSGHTSTTL	
387	14641	Calcitonin Receptor	NM_001742	cagaatccca ggacaaagag atcttcaaaa atcaaaaat aggttcacat ttacaagccg A	Homo sapiens
				gtgcttgga cgtttcttc ttctaataca cccaacccca attcttcctg ccttttcaaa	
				tcaaacctat ccaacaatat agcccaagcc attctttac gtctgaggac gaaagaagat	
				gatggatgca cagtacaaat gctatgaccg aatgcagcag ttaccgcac accaaggaga	
				aggtccatat tgcaatcgca cctgggatgg atgctgtgc tgggatgaca cacggctgg	
				agtattgtcc tateagttct gccagatta tttccggat ttgatccat cagaaaagg	
				tacaaaatac tgtgatgaaa aaggtgtttg gtttaaacat cctgaaaaa atcgaacctg	
				gtccaactat actatgtgca atgctttcac tctgagaaaa ctgaagaatg catatgttct	
				gtactatttg gctattgtgg gtcatcttt gtcaatttcc accctagtga tttccctggg	
				gatttcctg ttttcagga gccttggctg ccaaagggtt accctgcaca agaactgtt	
				tcttacttac attctgaatt ctatgattat cateatccac ctggttgaag tagtaccaca	
				tggaagctc gtgcgaagg acccggtgag ctgcaagatt ttgcatttt tccaccagta	
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				tgctgtggt gtgtttactg agaagcaacg cttggcggtg tattatctct tggcctggg	
				gttcccgctg gtgccaacca ctatccatgc tattacaag gccgtgtact tcaatgacaa	
				ctgctggctg agtgtgaaa cccatttgt ttacataac catgacctg tcatggcggc	
				acttggtc aatttctct tttgtctcaa cattgtccg gtgcttga ccaaatgag	
				ggaacccat gagcggaat ccacatgta cctgaaggct gtgaaggcca ccatgatcct	
				tgtgccctg ctgggaatcc agtttgtctg ctttccctg agaccttcca aagatgct	
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				gacctctac tgcttctgca caatgaggt ccaaacacc gtgaagcgc aatgggccc	
				attcaaaatt cagtggaaac agcttgggg gagggcccc tccaaccgt ctgctcggc	
				tgagccgt gctgcggag ctggcgacat cccaattac atctgccatc agggctgag	
				gaatgaacca gccaacaacc aaggcgagga gagtctgag atcatccct tgaatatcat	
				agagcaagag tcatctgctt gaatggaag gcaaacacag categtgat actgagccat	
				catttctgg gagaagacc atgcatttaa agtatcttcc atctccacg gaacgaaca	
				tatcattgt gaagaattat tcagtgaatt tgtccattgt aaatctgaag aagtatttc	
				ttggtactgt tgctttggga gacagtctag gaatggagtc tcccactgca acttgtgaac	
				tccatcttc atccaggact gagatgcaa tgtcacagta atgcaagcaa agtatcaaa	
				aaaaacaatg aaattgacct agttcagata cagggtgctc ctgtcaata ctgagccatt	
				tatacctttg aaatattaaa atcactgtca atattttat ttttaactct ggattttgaa	
				ttagattatt tctgtatttg gctatggatc tgatttttaa tttttttaa ttccagtcaa	
				ttctgatgtt actgagatgt ttaccatcc ttacaatga aaccacatga actagtgac	
				ctctgcaaga caaagcggt tttctaata gagattagta aatatgtgaa gaaaagacc	
				tgcatttggc aggaagatgt atgctttgaa tgcaaaagaa atttagagtc aattgtctga	

388	14641	Calcitonin Receptor	NP_001733.1	<p> aaacattaca tgcctcagctt ggttttgac aagcctgtcc attgggcagg acctagctgt tgtaagaat tggctttaat gttgaatgta ttttggttg tgaatgttat aaactgagag gtcaaaaaga atctatcact aaaaattttt acaaaactgc caaaaatata attcttagtg gaagacaata ctccctttta agagagtttg ccaactccct aaactccagg attataaag caaattactc caaggtttat aaagcagatt acctcttgcc ctgggtgtgt atctagcagt aaaagataaa tttgttgaat attggttaatt aaaagactcc acataagctc attaactgct ttccaccag cttcaaaagt taaaagagc tcaggctttt ccaggaagat ccaggagggc taattagaaa tcaactgtg gtgaccgct tgttcttgt tattacaaa caggaggagg aaaaattaac tgcctcaaat ttaaccataa atcaattctt gtttaacgtt tctcataaa atccagtatt atattatcat atctctctt acctccagt ataagatttt tgaatacct gaataaacca gtatcgttac tggcaccctga aattaatttg tgaatttgca acagtaatca gagttaccat tattaattt gtatgctaaa tgaggaggta cattgaacc ctccaaatct ccagtctcat ctatgtcata tttgccact gctttcaga agtgatttag ttgtggaag ataataaatt gattgttat ggtacatat ttgagcacc cagagaaaa taattatatt tctacagaga aatgaattt gggatactaa agtagttta gtctcttta ctgaatgtaa gggggggac gaaaagaag tattttcca atcacagtgt tatgtagtat tgtctatatt ttgtttacaa acatgaaaa cagagtattt ctggcagctg tggtaacaa gtgataatat attgctaaaa tattttagat gttattatgc taatatagta ggggttgagg aaacaaaaat agcttattat agaattgcac atagttctgc ccaattatg tgaatgtct atgttgtgt atatgtataa ataatacag agtcggttaa aagcaaaaa atgtatatatt gcataattt ctaaagaaat atattattca tcttttcatt c </p>	Homo sapiens
389	16041	C-C Chemokine Receptor 6	NM_004367	<p> MRFTFSRCL ALFLINHPT PILPAFSNOT YPTIEPKPFL YVGRKKMMD AQYKCYDRMQ P QLPAYQEGP YCNRTWDGWL CWDDTPAGVL SYQFCDYFP DFDSEKVTYK YCDEKGVWFK HPENNRWTSN YTMCAFTPE KLNAYVLYY LAIVGHSLSI FTLVISLGIF VFFRSLGCOR VTLHKMFLT YILNSMIII HLVEVVNGE LVRRDPVSCK ILHFFHQYMM ACNFWMLCE GIYLTLLIV AVFTEKQRLR WYLLGWGFP LVPTTHAIT RAVYENDNCW LSVETHLLYI IHGPVMAALV VNFEEFLNIV RVLVTMRET HEAESHMYLK AVKATMILVP LLGIQFWFVP WRPSNKMGLK IYDYVMHSLI HFQGFVATI YCFNCNEVQT TVKQWAQFK IQWNQWGRR PSNRSARAAA AAAEAGDPI YICHOELRNE PANNOGEESA EIIPNLIEQ ESSA caaacgttcc caaatcttc cagtcggctt gcagagactc ctgtctccc ggagataacc A agaagctgca tcttattgac agatggtcat cacattggtg agctggagtc atcagattgt ggggcccgga gtgaggctga agggagtga tcaagagcact gctgagagat cacctctact ttcctgtcac cgctgctgt gactgaagg ggtgaacca tacactcctt ttctacaac cagcttgcat ttttctgcc cacaatgagc ggggaatcaa tgaatttcag cgaatgtttc gactccagt aagattattt tgttcagtc aatactcat attactcagt tgattctgag atgttactgt gctcctgca ggagtcagg cagttctcca ggctatttgt accgattgac tactccttga tctgtgtctt tggcctcctg gggaatttc tgggtgtgat caccttctgt ttttataaga aggccaggtc tatgacagac gtctatctct tgaacatggc cattgcagac atcctctttg ttcttactct cccattctgg gcagtatgt atgccactgg tgcgtgggtt ttcageaatg ccacgtgcaa gttgtcaaaa ggcattatg ccatcaactt taactgcggg atgctgtccc tgacttgcat tagcatggac cggatcatcg ccattgtaca ggcactaag </p>	Homo sapiens

tcattccggc tccgatccag aactacccg cgacgaaaa tcattcgct tgtgtgtgg
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tacaataa caaacatg ttaggaaggt actgtcatg gtaggcag gtggtcaca
cctgtaatcc cagcatttg ggaagctaa atgggtggat cacttgaggt caggagtgtg
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cgtgtgtggt ggtgctgta atccagcta ctgggagggc tgaggcaaga gaatcgcttg
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aaataatgtc ttaagattca aagtctgtat ttttaagca tggctttggc ttgcaaat

282/448

Homo
sapiens

390 16041 C-C Chemokine Receptor 6 NP_004358.1
 MSGESNMFSDFDSEDFY SVNTSYYSVD SEMLCSLQE VRQFSRLFVP IAYSILICVFG P
 LLGNILVIT FAFYKARSM TDVYLINMAI ADILFVITLP FFAVSHATGA WFSNATCKL
 LKGIYAINEN CGMLLITCIS MDRYIAIVQA TKSFRLRSRT LPRTKIICLV VWGLSVIIS
 STFVFNQYN TQGSVDCEPK YQTVSEPIRW KLMLGLELL FGFPIPLMFM IFCYTFIVKT
 LVQAQNSKRH KAIRVIAV LVFLACQIPH NMVLIVTAAN LGRMNRSCQS EKLIGYTKTV
 TEVLAFELHC LNPVLYAFIG QKFRNYFLKI LKDLWCVRRK YKSGFSCAG RYSENISRQT
 SETADNDNAS SFTM

Homo
sapiens

391 16599 Smoothened NM_005631
 atggccgctg cccgccagc gcggggggcg gagctccgc tcctgggggt gctgctgctg A
 ctgctgctgg gggaccggg ccggggggcg gcctgagcg ggaacgcgac cgggctctggg
 cctcggagcg cggcggggag cgcgaggag agcggcgcg gactggccc tcgcgcgcg
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 ctgccagcc gtaccctcg ccaggccacc cgaggccct gtgccatcg ggagaggag
 cggggtggc ctgactcct gcctgcact cctgaccgct tccctgaag ctgcacgaat
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 gctgccagca agatcaaga gacctgctg gcctgggca ttttggcct cctggcctt
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392	16599	Smoothed	NP_005622.1	actggttcgg	ctctagg	gagcgagct tccgggacta tgtgtatgt caggccaatg tgaccatcgg gctgcccacc	Homo sapiens
				MAAARPARGP	ELPLGLLLL	aagcagccca tccctgactg tgagatcaag aatcgccga gcttctggt ggagaagatc	
				LSHCGRAAPC	EPLRYNVCLG	aacctgtttg ccattgttgg aactggcatc gcatgagca cctgggtctg gaccaaggcc	
				VIQPLICAVY	MPKCENDRVE	acgtgctca tctggaggcg tacttggtgc aggttgactg ggcagagtga ccatgagcca	
				EVQNIKENSS	GQCEVPLVRT	aagcggatca agaaagacaa gatattgcc aagccttct ctaagcggca cgaactcctg	
				TGLCTLEFLA	TFVADWRNSN	cagaacccag gccaggagct gtcttcagc atgcacacty tgtcccacga cgggcccgtg	
				MRLGPTSN	TLSCVIFVI	gcgggcttgg cctttgacct caatgagccc tcagctgatg tctctctgc ctggcccag	
				HLLTWSLPFV	LTVALIAVAQ	catgtacca agatgttggc tcggagagga gccatactg cccaggatat tctgtcacc	
				RGVMTLSIK	SNHPGLLSEK	cctgtggcaa ctccagtgc cccagaggaa caagcaaac tgtggctgtg tgaggcagag	
				ERSFRDYVLC	QANVTIGLPT	atctccccc agctgcagaa gcgctgggc cggaagaaga agaggaggaa gaggaagaag	
				TLIIWRTWC	RITGQSDDEP	gaggtgtgcc cgctggcgcc gccctctgag ctccacccc ctgcccctgc cccagtagc	
				AGLAFDINEP	SADVSSAWAQ	attctcgac tgcctcagct gcccgggcag aatgcctgg tggtgcagg tgcctggga	
				I SPELQKRLG	RKKRRKRKK	gctggggact cttgcgaca gggagcgtgg acctggtct ccaaccatt ctgccagag	
						cccagtcctc ctccagatcc attctgcc agtgacccg cccctgtgc atgggtctcat	
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						tcagtttcag cggtgccaac ctcttgcgt tctcttttg ttgatgagga cccagagctg	
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						actggttcgg	
						PRAGGSARR	SAAVTGPPPP P
						EAHGKLVLWS	GLRNAPRCWA
						RGWDFLRCT	PDRFEGCTN
						LFTEAEHQDM	HSYIAAFGAV
						WLAQFMDGAR	REIVCRADGT
						TSFKALGTTY	QPLSGKTSYE
						AGFVLAPIGL	VLIIVGYFLI
						GFVLITFSCH	FYDFNQAEW
						NLFAMEGTGI	AMSTWWTKA
						QNPQQLSFS	MHTVSHDGPV
						PVATPVPEE	QANLWVEAE
						LHPPAPFST	IFRLPOLPRQ
						KCLVAAGAWG	

393	17250	G Protein- Coupled Receptor GPR45	NM_007227	AGDSCRQGAW TLVSNPFCPE PSPQDPFLP SAPAPVAWAH GRRQLGPIH SRTNLMDFTEL MDADSDF	atggcctgca acagcacgtc ccttgaggct tacacatacc tgctgctgaa caccagcaac A gcctcagact cggggtccac ccagttgcc ccacccctca ggatctcctt ggcacatagt atgtgctga tgacgttgtt ggggttctct ggaacactg tggtctgcat catcgtgtac cagaggccgg ctatgcgtc ggcacatcaac ctgctgctgg ccacctggc cttctccgac atcatgtgt cctctgtgt catgcccttc accgcgtca cctccatcac cgtgcgtgg cactttgggg accacttct cgccctctca gccacgtct actggttttt tgcctggag ggcgtggcca tcctgtctcat catcagcgtg gaccgtcttc tcatacgtt ccagcgccag gacaagtga acccgccag ggccaaggtg atcatcgcg tctcctgggt gctgtccttc tgcatcgcg ggccctcgt cagggcctgg acgtggtgg agtgccggc gcggggccca cagtgcgtgc tgggctacac ggagctcccc gctgaccgag catacgttgt cactttggtg gtggcgtgt tcttcgccc ctttggctc atgctgtgc cctacatgt cactctcaac acggtccgca agaacgccgt gcgctgcac aaccagtgg acagcctgga cctgcggcag ctcacagg cggccttcg gcgctgcag cggcagcaac aggtcagcgt ggacttgagc ttcaagacca aggccttcac caccatcct atcctctcg tgggtcttc cctctgctg ctgccact ccgtctacag cctcctgtct gtgttagcc agcgtttta ctgcggttc tcctctacg ccaccagcac ctgcgtcctg tggttcagtt acctcaagtc cgtctcaac cccatgctt actgctggag aatcaaaaa tccgcgagg cctgcataga gttgctgcc cagaccttc aatctctcc caaagtgcct gacggatcc gaaggagaat ccagccaagc acagtatac tgtgcaatga aaacagctc gcggttag MACNSTSLEA YTYLLNTSN ASDSGTQLP APLRISLAIV MLMTVVGFL GNTVVCIIIV P QRPAMRSAIN LLLATIAFSD IMLSLCCMPF TAVTLITVRW HFGDFCRLS ATLYWFFVLE GVAILLIISV DRFLIIVQRQ DKLNPRRAKV IIAVSWLSF CIAGPSLTGW TLVEVPARAP QCVLGYTELP ADRAVYVTVL VAVFPAPFGV MLCAYMCILN TVRKNVAVRH NQSDSLDLRQ LTRAGLRRLQ RQQQSVSDLS FTKRAFTIL ILFVGFSLCW LPHSVYSLLS VFSQRFYCGS SFYATSTCVL WFSYLKSVFN PIVYCWRIKK FREACTIELLP QTFQILPKVP ERIRRIQPS TVVVCNENQS AV	Homo sapiens
394	17250	G Protein- Coupled Receptor GPR45	NP_009158.1	ggctctatga gctgctattg aacacggcag agcctgttgg tgacctgcac acaggagccc A tccagtcagt actgattgaa ttactcaagg ctgcctctct gcaagttga gcactacagg acgtcgggac tgggcatttc ctccaacat ggccgccact gcctctccg agccactcgc cactgaggat gccgattctg agaatagcag cttctattac tatgactacc tggatgaagt ggccttcagt ctctgcagga aggatgcagt ggtgtccttt ggcaagttct tcctccagt cttctatagc ctgatttttg tgtgggacct cagcgggaac ctctctcttc tcatggtctt gctccgttac gtgcctgca ggcggatgggt tgagatctat ctgctgaate tggccatctc caaccttctg tttctggtga cactgcctt ctggggcctc tccgtggcct ggcattgggt cttcgggagt ttcttgtgca agatgtgtgag cactcttat actataact ttacagtgg catcttttc attagtgca tgagcctgga caagtacct gagatcgttc atgcagcc ctaccacagg ctgaggacc gggccaagag cctgctcctt gctaccatag tatggcctg gtccctggcc gtctccatcc ctgatgtgt cttgtacag acacatgaaa atcccaagg tgtgtggaac tgccacgacg atttcggcgg gcattgggacc atttgaagc tcttctccg	Homo sapiens	
395	17345	G Protein- Coupled Receptor D6	NM_001296			Homo sapiens

Accession	Gene	Protein	Structure	Sequence
396	17345	G Protein-Coupled Receptor D6	NP_001287.2	<p>cttcagcag aacctcctag gggtttctct tcaactctt gccatgatct tcttctactc</p> <p>ccgtattggt ttgtgtcttg ttgagctgag gccgcagcg caggccggg ctttaaaaaat</p> <p>agctgcagcc ttggtgttg cctctctgt gctatggtt ccatacaat ccaacttggt</p> <p>tttgcatagc ttggttgacc tgaagtatt cgggaactgt gaggtagcg acatcataga</p> <p>ctacgaact caggttaacag agagcatcg cctctctac ttgtctttt ccccatcct</p> <p>gtatgcctt ccagtcacc gcttcgcca gtactbgaag gctttctctg ttgcctgtct</p> <p>tggtatggcac ttggcaactg gcactgcca ggcctcatia tccagctgtt ctgagagcac</p> <p>catacttact gcccaagagg aatgacttg catgaatgac cttgagagaga ggcagcttga</p> <p>gaactacct acaagagagg atgtgggaa taaatcgacc ttggtgtccac aattttggtc</p> <p>tggtgggaac agatgggaac cagctcaatt ggggtgtccac tcaaatgtct c</p> <p>LSGNLLIMV LRLYVPRRM VEIYLNLAI SNLLFVLTP FWGISVAWHW VFGSFLCKMW</p> <p>STLYTINFYI GIFFISCMSL DKYLEIVHAQ PYHRURTRAK SLLLATIWA VSLAVSIPDM</p> <p>VFQVTHENPK GVMNCHADFG GHGTIWKLF RLQQLLLGL LPLLAMIFFY SRIGCVLRL</p> <p>RPAGQCRALK TAAALVVAFF VLWFYPNLTL FLHTLLDLQV FGNCVSOHL DYALQVTEI</p> <p>AFLHCFSPI LYAFSSHRRF QYLKAFLAIV LGWHLAPGTA QASLSSES SILTAQEEMT</p> <p>GMNDLGERQS ENYPNKEDVG NKSA</p>
397	17355	Gaba (b) Receptor 1	NM_001470	<p>cgtctccgc tccctggct gccgcgcc cggggaagaa gagacagggg tgggttttg A</p> <p>gggaagcag agagagggg agagaccctg gccagcttg agcttgatt cgaaggagg</p> <p>agggacggga ggaggaagaa ggtggaggag aaggagggg ggaagcggga ggaagcggc</p> <p>ggcctggggc cttgagccc ggggagagcc ggggagccg gccgcgcgc cagatgtgt</p> <p>ctgctctgt tactggccc actctctc cgcccccg cgcgggcg ggcgcagacc</p> <p>cccaacgcca cctcagaagg ttgccagatc atacaccgc cctgggaagg gggcatcagg</p> <p>taccggggcc tgactcggga ccaggtgaag gctatacaat tctgccagt ggactatgag</p> <p>attgagtat ttgtccggg ggagcgcag ttggtgggg ccaagtgccg caagtgcctg</p> <p>gccaacggct cctggacaga tatggacaca ccagccgct gtgtccgaat ctgtcccaag</p> <p>tcttattga ccttgaaaa ttggaagtt ttctgacg ttgggacct cccagctctg</p> <p>caggagccc ggttgatt cgggtgtac ccgacttc atctgtgg cagctcccg</p> <p>agcatctga gtcaggcca gtggagacc ccaagccc actgccagt gaatogaacg</p> <p>ccacactcag aacggcgcg agtgtatc ggggactgt ttcccatgag cgggggctg</p> <p>ccaggggcc aggcctgcca gccgcggtg gagatggcg ttgagagcgt gaatagccg</p> <p>agggacatcc tgcgggacta tgagtcgaag ctcatccac acgacagcaa gtgtatcca</p> <p>ggccaagcca ccaagtacct atatgactg ctctacaag acctatcaa gatcatctt</p> <p>atgcttgct gcagctctg ctccacgtg ttggctgagg ctgtaggat ttggaacct</p> <p>attgtgttt cctatgctc cagctacca gctgtcaa accggcagc ttccccact</p> <p>ttcttcgaa cgcaccatc agccactc cacaacct cccgctgaa actcttgaa</p> <p>aagtgggggt ggaagaagat tgtaccatc cagcacca ctgagctct cacttcgact</p> <p>ctggacgacc ttgaggaacg gctggaattg agtatctt ccgccagagt</p> <p>ttcttctcag tccagctgt gccgtcaaa aacctgaag gccaggtgc ccgaatcatc</p> <p>gtgggacttt tctatgagac tgaagccgg aagtttttt ttgaggtgta caagagcgt</p> <p>ctctttggga agaagtacgt ctggttctct atgttggtt atgtgacaa ttggttcaag</p>

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398	17535	Gaba (b) Receptor 1	NP_001461.1	MLLLLLLAPL FLRPPGAGGA QTPNATSEGC QIIHPWPWEGG IRYRGLTRDQ VKAINFLPVD P YEIEYVCRGE REVVGPKVRK CLANGSWTDM DTPSRVCRIC SKSVLTLENG KVFLTGGDLP ALDGARVDFR CDPDFHLVGS SRSICSGQGW STPKPHCQVN RTPHSERRAV YIGALFPMSG GWPGGQACQP AVEMALEDNV SRRDILPDYE LKLIHDSKC DPGQATKLYL ELLYNDPIKI ILMPGCCSVS TLVAEARMW NRVLSYSS SPALSNRQRF PTFETHPSA TLHNPTRVKL FEKWWKKIA TIQQTTEVFT STLDLEERV KEAGIEIFER QSFSDPAVP VKNLKRQDAR IIVGLFYETE ARKVFCEVYK ERLFGKKYVW FLIGWYADNW FKIDPSINC TVDETEAVE GHITTEIWM NPANTRISN MTSQEFVEKL TKRLKRHPPE TGGFQEAFLA YDAIWAALALA LNKTSGGGR SGVRLEDFNY NNQITDQIY RAMSSSFEG VSGHVVFDS GSRMAWTLIE QLQGSYKKI GYYDSTKDDL SWKTDKQIG SPADQTLV IKTFRLSQK LFISVSVLSS LGIVLAVVCL SFNINSHVR YIQNSQPNLN NLTAVGCSLA LAAVFPLGLD GYHGRNQFP FVCQARLWLL GLGFSLGYS MFTKIWWVHT VFTKKEEKE WRKTLPEWKL YATVGLLVGM DVLTLAIWQI VDPLHRTIET FAKPEPKEDI DVSIIPQLEH CSSRKNMTWL GIFYGYKGLL LLLGIFLAYE TKSVSTEKIN DHRVGMAYI NVAVLCLITA PVTMLSSQK DAAFAFASLA IVFSSYITLV VLFVPRMRL ITRGEWQSEA QDTMKTGSST NNNEEKSR LLEKENRELEK IIAEKEERVS ELRHQLQSRQ QLRSRHPPT PPEPSGGLPR GPPEPPDRLS CDGSRVHLLY K	Homo sapiens
399	17666	Glucagon- Like Peptide 1 Receptor	NM_002062	gaattccggg ttgtgcac cactctggaa ccgctcgtgt gtggcctgtc ggaatgacat A cgccctcacc agtctccgca cgcgttccc aggtggcagc gatggccag tcctgaactc cccgccatgg ccggegcccc cggcccgctg cgccttgcc tgctctgtct cgggatgggtg ggcaggccg gcccccgccc ccagggtgcc actgtgtccc tctggagagc ggtgcagaaa tggcgagaat accgacgcca gtgccagcgc tccctgactg aggatccacc tctgcccaca gactgttct gcaaccggac ctccgatgaa tacgctgtgt ggcagatgg ggaaccaggc tcgttcgtga atgtcagctg cccctggtac ctgcccctgg ccagcagtgt gccgagggc cacgtgtacc ggttctgac agctgaagg cctggctgtc agaaaggaca ctccagcctg ccctggaggg actgtcggga gtgcaggag tccaaggag gggagagaa cccccggag gagcagctcc tgttctcta catcatctac acggtgggct acgcactctc ctctctgtct ctgggttatcg cctctgcgat cctcctcggc ttacagacc tgcactgcac caggaaactac atccacctga acctgtttgc atccctcacc ctgcagacct tgcctgtctt catcaaggac gcagccctga agtggatgta tagcacagcc gccacagc accagtggga tgggtccctc tcctacctgg actctctgag ctgcgcgctg gtgttctctg tcatgcagta ctgtgtggcg	Homo sapiens

Accession	Gene	Protein	Species	Sequence
400	Glucagon-Like Peptide 1 Receptor	NP_002053.1	Homo sapiens	gccaattact actggctctt ggtggagggc gtgtactctg acacactgct ggccttctcg gctttatctg agcaatggat cttcaggctc tacgtgagca taggctgggg tgttccccctg ctgtttgttg tccccgggg catttcaag tactctatg aggcagggg tgcctggacc aggaactcca acatgaacta ctggctcatt atccgctgc cacttctct tgcctatggg gtgaacttcc tcatctttgt tgggtgcatc tgcctgtgg tatcaaat gaagccaat tcatgtgca agacagacat caaatgcaga cttgccaagt ccacgtgac actcateccc ctgctgggga ctcatgagt catctttgcc tttgtatgg acgagcacgc ccggggggacc ctgcgcttca tcaagctgtt tacagagctc tcttcacct ccttcacgg gctgatggg gccatattat actgtcttgt caacaatgag gtccagctgg aattcggaa gactcgggag cgtggggc ttgagcactt gcacatccag agggacagca gcatgaagc cctcaagtgt cccaccagca gctgagcag tggagccacg gcgggcagca gcatgtacac agcacttgc caggctcct gcagctgaga ctccagcgcc tgcctcctt ggggtccttg ctgcagccgg gtggccaatc cagctcccc cacaataacc
17666	Glucagon-Like Peptide 1 Receptor	NP_002053.1	Homo sapiens	gtggccaatc cagctcccc cacaataacc
401	G Protein-Coupled Receptor LOC51210	NM_016372	Homo sapiens	gagatagagc ctgagatgg ggaactggcc cctgcctggg ggattgggtc gtgacctgtg tggagcccca cactgagctg cagtgggtgg ggaggtggt ttacaggggt gctctgtgca gccccttga tttccccct ggagtcacag gtccagggga aggagacag tggcccagg ctgctggcgg tctcaactcc ccagggtctg gtgtggcgg gatgacacc ctggaggagg tgacttggc caatgggag acagcgctac cccccctt ggaccaaac atcagtgc ctacgcctg cctgctgctg ctctacgag acattggcac ctccagggtc cggtaactgg acctcttct gctcactccc aatgtgctt tctcactct cctgcttgg aagcttccat ctgctcgggc gaagatccg atcaactcca gccccattt tateacttc tacatcctgg tgtttgttgt ggctgggtg ggcattgcc gggcgtgggt atccatgac gtgagacct cgaagctgc aactgttct gataagatcc tgtggagat caccgcctt tctctgtctg ccatacagc ggtgctggc atcaccacag tgcgttccct ggcctactct agtaagtcca gcatcaagc ggtgctggc atcaccacag tgcgttccct ggcctactct aatatctat gccatgggg ccgccagttc tggctggta gctcctgctt ctctctctg tctcgaggga gcttctact gtatcgggc atcctggcac tgcacaaat ctcctgctt tctcgaggga tgcgtctgt cttcgacatc atcgaggggc tctgctgtgt agatgccaca ctgttctgt acttcagctt cttcgctcgg ctcatctacg tggcttccct ccggggcttc ttcggctcgg agccaagat cctcttctcc tacaatagcc aagtggacga gacagaggag
18471	G Protein-Coupled Receptor LOC51210	NM_016372	Homo sapiens	gagatagagc ctgagatgg ggaactggcc cctgcctggg ggattgggtc gtgacctgtg tggagcccca cactgagctg cagtgggtgg ggaggtggt ttacaggggt gctctgtgca gccccttga tttccccct ggagtcacag gtccagggga aggagacag tggcccagg ctgctggcgg tctcaactcc ccagggtctg gtgtggcgg gatgacacc ctggaggagg tgacttggc caatgggag acagcgctac cccccctt ggaccaaac atcagtgc ctacgcctg cctgctgctg ctctacgag acattggcac ctccagggtc cggtaactgg acctcttct gctcactccc aatgtgctt tctcactct cctgcttgg aagcttccat ctgctcgggc gaagatccg atcaactcca gccccattt tateacttc tacatcctgg tgtttgttgt ggctgggtg ggcattgcc gggcgtgggt atccatgac gtgagacct cgaagctgc aactgttct gataagatcc tgtggagat caccgcctt tctctgtctg ccatacagc ggtgctggc atcaccacag tgcgttccct ggcctactct agtaagtcca gcatcaagc ggtgctggc atcaccacag tgcgttccct ggcctactct aatatctat gccatgggg ccgccagttc tggctggta gctcctgctt ctctctctg tctcgaggga gcttctact gtatcgggc atcctggcac tgcacaaat ctcctgctt tctcgaggga tgcgtctgt cttcgacatc atcgaggggc tctgctgtgt agatgccaca ctgttctgt acttcagctt cttcgctcgg ctcatctacg tggcttccct ccggggcttc ttcggctcgg agccaagat cctcttctcc tacaatagcc aagtggacga gacagaggag

402	18471	G Protein- Coupled Receptor LOC51210	NP_057456.1	MDTLEEVTTWA NGSTALPPPL APNISVPHRC LLLLYEDIGT SRVRYWDLIL LIPNVLELIF P LLWKLPASARA KIRITSSPIF ITFYILVFFV ALVGIARAVV SMVSTSNAA TVADKILWEI TRFLLAIEL SVIILGLAFG TWESKSIKR VLAITTVLSL AYSVTQGTLE ILYPDAHLISA EDFNIYGHGG RQFWLVSSCF FFLVYSLWVI LPKTLKERI SLPSSRSFYV YAGILALLNL LQGLGSVLLC FDIIEGLCCV DATTFLYFSE FAPLIYVAFI RGFGESEPKI LFSYKQCVDE TEEPDVHLPO PYAVARREGL EAAGAAGASA ASYSTQFDS AGGVAYLDDI ASMPCHTGTI NSTDSERWKA INA	Homo sapiens
403	19072	G Protein- Coupled Receptor Ls19072	LG100650	agtgatgagc ggcgggtgccc tggcagtgca gtgggtggc tggatgtgg gggcctctcc A ctgtgtggcca atgcttgggg cactctcagc gttggcgcca agcagaagaa gtggaagccc ttggagtcc tgcgtgtgac actcgcggcc acccaccatc taaatgtggc cgtgcccac gccacctact ccgtgtgtgca gctcggcgcc cagcgccccc acttcgagtg gaatgagggt ctctgcaagg tcttctgtc cactctctac accctcacc tggccacctg tttctctgtc acctccctct cctaccaccg catgtggatg gtctgtggc ctgtcaacta ccggtgagca tgtgaagttc tgggttctt tgggttctaa gcaggcgtga aaacaaagac atatctggtg tgccatgcy cacacaggag tggccacacc tgtggcatgc tgggaggcca ggcaggctca ggagggtcg ctgtaagctg ctggggggcat acagtagct ttgcatgggt agacacaagc agccaataca gaatgcttg aagagggacg tbtgacaatg ttcacagtat cctctatgca aggaaacaag cctgcccaca ctggctgtgc catgactatg atatactgg ggtgtgggt gcctgggtgg tgcggatccc ctacaggctc ccagggcct ggggaggccc tgtgggtgac gccagatccc tctgttccac cctgctcat gccagctga gcaatgcca gaagcaggcg gtgcacacag tcatgggtat ctggatgggt tcttccatc tgtcgccct cgtgccgtg ggctggcacg acaccagcga gcgttctac acctatgggt gccgttcat cgtggctgag atcggcctgg gctttggcgt ctgttctctg ctgctgttg gcggcagcgt ggcctgggc gtgatctgca cagccatcgc ccttccag acgtggccg tgcagtgagg gcgccaggcc gaccgcgcg ccttcacct gccaccatc gtggtggagg acgcgaggg caagggcgcc tcttccatcg atggctcga gcccgccaaa acctctctgc agaccaggg cctcgtgacc accatagtct tcatctacga ctgctcatg ggttccctg tgcgtgtggg tgacggcgtc gggtagaggg gcctgtctct ggacacagcc tggggtgtgt catactccag gcatcaggtg gttgagtctc cagaccat ccttgagat gggctgtgat atcgtccca tttccagat	Homo sapiens

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405	19501	1s19072	G Protein- Coupled Receptor KIAA0758	AB018301	GSVANGVICT AIALFQTLAV QVGRQARRA FTVPTIVVED AQKRRSSID GSEPAKTSIQ TTGLVTTIVE IYDCLMGFPV LVNSFSSIRA DASAPWALC VLWCSVAQAL LLPVFLWACD RYRADLKAVR EKCMLAMAND EESDDG	Homo sapiens
					gtgcaagaag aaaaatagatg ttatgcccac ccaaaatttg gcaaatgaag aatgaaggt A gatgtgcgac acaatccctg tatctttgaa ctgtgcagtg caggtaatg ttaattggag caaagttagaa tggagcagag aaggaaaaat aatatccca ggaacccctg agacagacat agattctagc tgcagcagat acacctcaa ggctgatgga accagtgcc caagcgggtc gtctggaaca acagtcact acatttgta gttcatcagt gcttatggag ccagagggcag tgcaaacata aagtgacat tcactctgt gccaatcta acaataacc cggaccacaat ttctgtttct gagggacaaa acttttctat aaaaatgcac agtgatgtga gtaactatga tgaggtttat tggacacatt ctgtggaat taaaatatac caaagatttt ataccacgag gaggtatctt gatggagcag aatcagtcact gacagtcaag acctcgacca gggagtgga tggaacctat cactgcatat ttatatataa gaattcatat agtattgcaa ccaagacgt ttcatgcagt ggttcccatc aatcaagt ctgcataag gagtgagg actacaaagt tactttccat atgggttctt catccttcc tgctgcaaaa gaagttaaca aaaacaagt gtgtacaaa cacaattca atgcaagctc agtttccctg tgtcaaaaa ctgttgatgt gtgtgtcac tttaacaatg ctgtaataa ttcatgttg agccatcta tgaagctgaa tctgttctct ggggaaaaa tcacatgcca ggcgttctc aaagttccc agcagccctg agatcccat gaaagtcac cagaagctat gccgttctc aaagttccc agcagccctg agatcccat tggcgggacc atcaattaca aatgttagg ctccagtgag gaggaaga gaaatgactg catctctgcc ccaataaaca gtctgtcca gatggctaa gctttgatca agagccctc tcaggtatgag atgttcccta catacctgaa ggaatttctt attagcatag acaagcga acatgaaatc agcttcttc ctggaggtct gggagccatt attacatcc ttgatctgt ctcaacagtt ccaacccaag taaattcaga aatgatgag cagtgctct ctacggttaa tgtcatcctt ggcaagcccg tcttgaaac ctggaaggtt ttacaacag aatggacca tcagagttca cagctactac attcagtga aagatttcc caagcattac agtcaggaga tagccctctt ttgtccttct ccaaaactaa tgtgcagatg agcagcacgg taatcaagt cagccacca gaaacctatc aacagaggtt tgtttccca tacttgacc tctggggcaa tgtgttcatt gacaagagct atctagaaa ctgcaagtcg gattcgtcta ttgtcaccat ggctttccca actctccag ccactctgc caatcagact atgcattca ggaattcaat gagcttagtg atgacaacca ctgtcagcca caaacgaaag tgtgtcttct ggaattcag gacttttaag acaatagcc cttaagcgg ggtgggacag cagtgggtgc tatgtgaag aagtgatgg gcttgcaac aacacaggg ggtgggacag cagtgggtgc tatgtgaag aagtgatgg ggacaatgc acctgtatct gtgaccacct aacatcatt tccatccca tgcacctga ctcccaagat cctagtctc tccctgggaat actcctggat attatttctt atgttgggtt gggcttttcc atcttgagct tggcagcctg tctagtgtg gaagctgtgg ttgtgaaatc ggtgaccaag aatcggaact cttatatgc ccacacctgc atagtgaata tgcgtcctc ccttctgttc gccacaacct ggttcattgt ggtcgtgacc atccaggaca atcgctacat actctgaag acagcctgtg tggctgccac cttctctcat cacttctct acctcagcgt cttcttctgg atgctgacac tgggctctcat gctgttctat cgcctgggtt tcattctgca	

406	19501	G Protein- Coupled Receptor KIAA0758	BAA34478.1	<p>tgaacaagc aggtccactc agaaagccat tgccttctgt ctggctatg gctgccact tgccatctcg gtcatacgc tggagccac ccagcccccg gaagtctata cgaggaagaa tgtctgttg ctcaactggg aggacaccaa ggccctgctg gcttctgcca tcccagcact gatcatttg gtgtgaaca taaccatcac tattgtggtc atcacaaga tcttgagcc ttccattgga gacaagccat gaaagcagga gaagagcagc ctgtttcaga tcagcaagag cattgggtc ctacacccac tcttggtgct cactggggt tttgtctca cactgtgtt cccaggacc aacctgtgt tccatatcat attgccatc ctaaatgtct tccagggtt attcatlta ctcttggat gcctctggga tctgaaggta caggaagctt tctgaataa gttttcattg tcgagatggt ctccacagca ctcaaatgca acatccctgg gttcatccac acctgttt tctatgatt ctccaatatc aagagattt acaatttgt ttgtataaac aggaaagctat aatgtttcca ccccaagagc aaccagctca tccctggaaa actcatccag tgcttcttgc ttgtcaact aagaacagga taatccaacc tacgtgacct cccggggaca gtggctgtgc ttttaaaaag agatgcttgc aaagcaatgg ggaacgtgtt ctcggggcag gtttccggga gcagatgcca aaagacttt tcatagaga agagctttc tttgtaaaag acagaataaa aataattgtt atgttctgt ttgttccctc cccctcccc ttgtgtgata ccacatgtgt atagtattta agtgaactc aagccctcaa ggcccaact cctgtctat attgtaatat agaatttcga agagacattt tcaatttta cacattggc acaagataa gctttgatta aagtagtaag taaaaggcta cctaggaat acttcagtga attcaagaa ggaaggaag aaggaaggaa ggaagaagg gaggaagaa gggagaaag gaaaggaag aaaaagaa agatgaaaat aggaacaaat aaagacaaa acattaaag gccatttgt aagatttcca tgttaatgat ctaataaat cactcagtc aacattgaga attttttt taatggctca aaaaaggaaa ctgaaagcaa gtcattggga atgaactt tgggcagtat cttccgtatg tcttcttagc taagaggagg aaaaaaggc tgaataata gggaggaat tccctcatca gaacgactc aagtggata caatattat aagaatgaa tggaggaag tatgatctc ctgagactaa cttgtatgt taaggtttga actaagtga tgcattgca gaggaagtat tataagata tgcattaga tccaagtgt gattaattt ttatagtta tcagaaaaag cttatattt agttgttc acattttgaa agcaaaaaat atatttga tataccctc aattgcaaa ttgtatatgt tgcactgaag acagaccctg tcataattt aatgcttca agcaggtact tctctgtgca ttatagaata gattttaata atctatagc attgtatatt attattgtg ttgtcactgt tattattatt gtggatactg gccctgggtg tgttgcatag ctccctatgt attctctgt tccatcttta agttccaga ccaatataca ttaagagttt tgcaggtct aaattgtgtt tattccaacc acgtggaag ctctggaaa gaaattttac attcgtgtg tctgtgctc taatgacact tgacctgtt gaacaaatgg cagagcctt cccaaggatt tgattgttg tgaattatct gcatgtgctg tttttttg tgtgtatttc attaaaaat ataaattt atg</p>	<p>Homo sapiens</p>
				<p>CKKIDVMP1 QILANEEMKV MCDNPNVSLN CCSQGNVWS KVEWQEGKI NIPGPETDI P DSGCSRYTLK ADGTQCPGS SGTIVYTCE FISAYGARG ANIKVTFISV ANLTITPDPI SVSEGNFSI KCISDVSNYD EVIWNISAGI KIYQRYTTR RYLDGAESVL TVKTSTREWN GTYHCIFRYK NSYSIATKDV IVHPLPLKLN IMVDPLEATV SCSGSHHKC CIEEDGDKV TFHMGSSSLP AAKEVNKKQV CYKHNFNASS VSWCSKTVDV CCHFTNAANN SWSPSMKLN LVPGENITCQ DPVIGVEPG KVIQKLCRFS NVPSSPESPI GGTITYKCVG SQWEKRNDC</p>	

407	21632	G Protein- Coupled Receptor Ls21632	AB040964	A	Homo sapiens
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LANNTGGWDS	SGCYVEEGDG	DNVTCICDHL	TSFSLMSPD	SPDPSSLLGI	LLDIISYGV
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AISVITLGAT	QPREVYTRKN	VCWLNWEDTK	ALLAFAIPAL	IIVVNVITIT	IIVITKILRP
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Homo
sapiens

408 21632 G Protein-
Coupled
Receptor
Is21632

BAA96055.1

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Homo
sapiens

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Coupled
Receptor
GPR92/GPR93

NM_020400

410 22315 G Protein-
Coupled
Receptor
GPR92/GPR93 NP_065133.1 Homo sapiens

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Homo
sapiens

413	25359	G Protein- Coupled Receptor GPR34	NM_005300	<p>YECVPYKEQ KVFICPGLLK GYQSEHLFE SDHSGAWCK DPLQASDKTY YMPWTPYRTD</p> <p>TLTEYSSKDD FIAGRTTTY KLPHRVDTGT FVYDGALEFF NKERTRNIVK FDLRTRIKSG</p> <p>EAIIANANYH DTSPYRWGGK SDIDLAVDEN GLWVIYATEQ NNGKIVISQL NPYTLRIEGT</p> <p>WDTAYDKRSA SNAFMICGIL YVVRSVYEDD DNEATGNKID YIYNTDQSKD SLVDVFFPNS</p> <p>YQYIAADVYN PRDNLIVWN NYHVVKYSLD EGPLDSRSGQ AHGQVSYIS PPIHLDSELE</p> <p>RPSVKDISTT GPLGMGSTTT STTLRTTLLS PGRSTTPSVS GRRNRSTSTP SPAVEVLDDM</p> <p>TTHLPSASSQ IPALEESCEA VEAREIMWFK TRQGLIAEQP CPAGTIGVST YLCLAPDGIW</p> <p>DPQGPDLUNC SSPWNHITQ KLGSETAAN IARELAEQPR NHLNAGDITY SVRAMDQLVG</p> <p>LLDVQLRNLIT PGGKDSAAKS LNKLOKRERS CRAYVQAMVE TVNNLLQPQA LNAWRDLTTS</p> <p>DQLRAATMLL HTVESAFVL ADNLKTDIV RENTDNIKLE VARLSTEGNL EDLKFPENMG</p> <p>HGSTIQLSAN TLKQNGRNGE IRVAFVLYNN LGPYLSTENA SMKLSTEALS TNHSHVIVNSP</p> <p>VITAAINKEF SNKVYLADPV VFTVKHIQKS EENFNPCSF WSYSKRTMTG YWSTQGCRLL</p> <p>TTNKTHHTCS CNHLTNFAVL MAHVEVKHSD AVHDLLEDVI TWVGILLSLV CLLICIFTFC</p> <p>FFRGLQSDRN TIHKNLCISL FVAELFLIG INRTDQPIAC AVEAALLHFF FLAAFTWMFL</p> <p>EGVQLYIMLV EVFESEHSRR KYFYLVGYGM PALIVAVSAA VDYSYGTDK VCWLRLDTYF</p> <p>IWSFIGPATL IIMLVNIFLG IALYRMFHHT AILKPESGCL DNINVEDNRP FIKSWVIGAI</p> <p>ALLCLLGLTW AGLMYINES TVIMAYLFTI FNSLQGMFIF IFHCVLQKKV RKEYGKCLRT</p> <p>HCCSGKSTES SIGSGKTS GS RTPGRYSTGS QSRIRRMWMD TVRKQSESSF ITGDINSSAS</p> <p>LNREPYRETS MGKLNIAAY IGASEQCQGY KCHGYSTTEW</p> <p>atgagaagtc ataccataac aatgcagaca acttcagctca gcagctggcc ttactcctcc A</p> <p>cacagaatgc cttttataac caatcatagc gaccacacgc cacaaaaactt ctcaqcaaca</p> <p>ccaaatgtta ctactgtcc catgatgaa aaattgtctat ctactgtgtt aaccacatcc</p> <p>tactctgtta ttttcacgt gggactgggtt gggaacataa tcgcctctcta tgtatttctg</p> <p>ggatttcacc gtaaaagaaa ttccattcaa atttattctac ttaacgtagc catcgagac</p> <p>ctcctactca tcttctgcct ccctttccga ataattgtatc atattaacca aaacaagtgg</p> <p>acactaggtg tgattctgtg caagttgtg ggaacactgt tttatatgaa catgtacatt</p> <p>agcattattt tgcctggatt catcagtttg gatcgctata taaaaattaa tcggtctata</p> <p>cagcaacgga aggcaataac aaccaacaa agtatttatg tctgttgtat agtaggtatg</p> <p>cttgctcttg gtggattcct aactatgatt attttaacac ttaagaaaagg agggcataat</p> <p>tccacaatgt gtttccatta cagagataag cataacgcaa aaggagaagc catttttaac</p> <p>ttcattcttg tggtaattgt ctggctaatt ttcttactaa taatcctttc atataatag</p> <p>attgggaaga atctattgag gatttctaaa aggaggtcaa aatttcttaa tctgtgtaaa</p> <p>tatgccacta cagctogtaa ctcttttatt gtacttatca tttttactat atgttttgtt</p> <p>ccctatcatg cctttcgatt catctacatt tcttcacagc taaatgtatc atcttgctac</p> <p>tggaagaaaa ttgttcacaa aaccaatgag atcatgctgg tctctcatc tttcaatagt</p> <p>tgcttagatc cagtcagtga tttctctgatg tccagtaaca ttgcgaaaaat aatgtgcaa</p> <p>cttcttttta gacgattica aggtgaacca agtaggagtg aaagcacttc agaatttaa</p> <p>ccaggataact cctgcatga tacatctgtg gcagtgaataa tacagtctag ttctaaaaagt</p> <p>acttga</p>	Homo sapiens
414	25359	G Protein- Coupled	NP_005291.1	<p>MRSHITMTT TSVSSWPYSS HRMREITNHS DQPPQNFESAT PNVTTCPMDE KLLSTVLTTTS P</p> <p>YSVIFIVGLV GNIILYVFL GIHRKRNSIQ TYLLNVAIAD LLLIFCLPFR IMYHINQNKW</p>	Homo sapiens

Receptor GPR34	415	30698	G Protein- Coupled Receptor Ls30698	AX068267	<p>TLGVILCKV GTLFYNNMYI SIILGFIISL DRYTKINRSI QQRKAITTKQ SIYVCCIWM</p> <p>LALGFLTMI ILTLKGGHN STMCIFYRDK HNAKGEAIFN FILVMFWLI FLILISYIK</p> <p>IGKLLIRISK RRSKFPNSGK YATTARNSEFI VLIIFTICFV PYHAFRFIYI SSQNLVSSCY</p> <p>WKEIVHKTNE IMLVLSSFSN CLDPVMYFILM SSNIARKIMCQ LLFRFQGEPE SRSESTSEFK</p> <p>PYSLHDTSV AVKIQSSSKS T</p> <p>gttctcagat cggcttctcg caacaggcag tcagttctca ctgggcccct tggactccca A</p> <p>tttcaaaaat ggagagaca gatcacagcc actgaccagg gaccgtggga ggtgccacgt</p> <p>gatggtgag catagctga gggagctgag ctctgacctt cctgctgggt gattctccac</p> <p>ctctgggctg ctatgcttac tctctggatg cctggaagat cctcatgtat gaaaatgaag</p> <p>tcccaggcaa ccatgatttg ctgcttagtg tcttctctgt ccacagaatg ttccactat</p> <p>agatccaaga ttcactaaa aagctatagt gaagtggcca accacatcct cgacacagca</p> <p>gccatttcaa actgggcttt cattcccaac aaaaatgcca gctcggattt gttgcagtea</p> <p>gtgaatttgt ttgccagaca actccacatc cacaataatt ctgagaacat tgtgaatgaa</p> <p>ctcttcattc agacaaaagg gttccacatc aacctataa cctcagagaa agcctcaat</p> <p>ttctccatga gcatgaacaa taccacagaa gatattcttag gaatggtaca gattccacgg</p> <p>caagagctaa ggaagctgtg gccaaatgca tcccaagcca tagcatagc ttcccaacc</p> <p>ttgggggcta tctgagaga agccacttg caaatgtga gtcttcccag acagtaaat</p> <p>ggtctggtgc tateagtggt ttaccagaa aggttgcaag aatcatact cacttcgaa</p> <p>aagatcaata aaaccgcaa tgccagagcc cagtgtgttg gctggcactc caagaaaagg</p> <p>agatgggatg agaaagcgtg ccaaatgatg ttggatatca ggaacgaagt gaaatggcgc</p> <p>tgtaactaca ccagtgtggt gatgtcttt tccattctca tgctctccaa atcgatgacc</p> <p>gacaaagttc tggactacat cactgtcatt gggctcagcg tctcaatcct aagcttggtt</p> <p>ctttgctga tcaattgaag cacagtgttg tccgggttgg ttgtgacgga gatatacat</p> <p>atgctgcacg tgtgcactgt gaatatagca gtgtcccttc tgactgcaa tgtgtgggtt</p> <p>atcataggct ctcaatttaa cctctctctg ttttcttggga tgctcttcaa agcattgctc</p> <p>ttttcagcc acttttcta cctctctctg agtatgata agtccgaaat gatggtcatt</p> <p>atcatttatg gaattatggt cattttccgt gtgccattg atcattgctg tcactacagt tgctatca</p> <p>ggctttgcca ttggctatgg gtgccattg gagacctgag gctgttggc taaactggga caataccaaa</p> <p>gagccagaga acggctacat gagacctgag cccggcgttc gtcattgttg ctgtaaatct gatttggtt</p> <p>gccccttttag catttgccat cccggcgttc tctattggga gtccaagtc tcaggatgtg</p> <p>ttgggtgttg ctgtcaacac tcagaggccc tctattggga gtccaagtc tcaggatgtg</p> <p>gtcataatta tgaggatcag caaaaatgtt gccatcctca ctccactgct gggactgacc</p> <p>tgggggtttg gaatagccac tctcatagaa ggcacttctc tgacttcca tataattttt</p> <p>gccttgctca atgctttcca ggggtttttc atcctgctgt ttggaacctat tatggatcac</p> <p>aagataagag atgctttgag gatgagatg tcttccatga aggggaaatc gagggcagct</p> <p>gagaatgcat cactaggccc aaccaatgga tctaaattaa tgaatcgtca agtatgaaat</p> <p>gctgccccat ttctcatgga tgtcctgaga ccaagagggg agatccagga gaaagagcc</p> <p>atggaaaagca ggctggagt agagggaatg gtcactgctt cttggaagac ttctcttct</p> <p>tgtcaggagt gactcccaag ctcttgtctg gccgaagaaa aactgaggat aacatttgct</p> <p>gactgggctt taaggagcat gatttatgga ccccttaacc taccgtgcc ctgcaagagg</p> <p>ctggcttctt ggtcaatctt gactagatta agagtcaatc tgcaagccat tttatggctc</p>	Homo sapiens
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Homo
sapiens

CAC27252.1
 G Protein-
 Coupled
 Receptor
 Ls30698

416

30698

ccctggccag ctgggggctg tagggccctg ctgggcttgg tgcgtttca ctctgaggc
 ctgctctg gtcctatgc tgcctctcc atcactctg gtgactctg ggtactttgg
 acagtggg ttcgatcaa ttttaggggt aggggtgggg gtggagtg ggtggtgggt
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 atagggaac gaagaaagc agagaactg ttaatatgc tgattatttt agtctatttt
 agacctgag taaactaat tagcttctag gatccaagt tcttattttg tgaacacagg
 aaaaaaatt ctgtaggta ttaactgttg tgtgtttgag ttaactgeac atgtttgtgt
 ttgttatat gtgtctttta aataactat atataaaga gattctggtt gttattttag
 acataaaga atatatgtac ctttcac

MKMSQATMI CCLVFFLSTE CSHYRSKIHL KSYSEVANH LDTAAISNWA FIPKNASSD P
 LLQSVNLFAR QLIHNHNSN IVNELFIQTK GFHNHNTSE KSLNFSMSMN NTTEDILGMV
 QIPROELRKL WPNASQAISI AFPTLGAILR EAHQONVSLP RQVNGLVLSV VLPERLQEI
 LTFERINKTR NARAQCVGWH SKRRWDEKA QMMLDIRNE VKRCNYTSV VMSFSLMSS
 KSMTDKVDY ITCIGLSVSI LSLVLCIIIE ATVWSRVVVT EISYMRHVCV VNIASVLLTA
 NWFYIGSHF NIKADYNYMC VAVTFESHFF YLSLFFWMLF KALLIYIGIL VIFRMMKSR
 MMVIGFAIGY GCPLIAVTT VAITEPENGY MRPEACWLNW DNTKALLAFA IPAFVIVAVN
 LIVLVAVN TQPSIGSSK SQDVIMIRI SKNVALLTPL LGLTWGFGIA TLIEGTSLTF
 HIIFALLNAF QGFFILLFGT IMDHKIRDAL RMRSSSLKGG SRAAENASLG PTNGSKLMNR

Q6

417

30875

G Protein-
 Coupled
 Receptor
 GPR87/GPR95

NM_023915

Homo
sapiens

ggacagagg tttcgtttt atgctttacc agaaaatcca cttccctgcc gacctagtt A
 tcaagctta ttcttaatta gagacaagaa accgtgttca actgaagac accgatgatg
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 cccacgcctc aatcgtcccc agtgtttcc tgacagcat ctttgcttac agtgcatac
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 aatgaatttg acacaattgt cttgcgggtg ctttatctca ttatatgtt ggcaagcacc
 ttgctgaatg gtttagcagt gtggatcttc ttccacatta ggaataaac cagcttcata
 ttctatctca aaaaatagt ggttcagac ctcaataaga cgctgacatt tccatttoga
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 tcagttttgt ttatgcaaa catgtatact tccatcgtgt tccctgggct gataagcatt
 gatcgtatc tgaagtggt caagccattt gggaactctc ggatgtacag cataacctc
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 cctttggggg tcaaatggca tacggcagtc accatgtga acagtgctt gttgtggcc
 gtgctgtga ttctgatcgg atgtacata gccatatcca ggtacatcca caaatccagc
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 tgtaggtcat tttcaagaag gctgttcaaa aaatcaata tcagaccag gagtgaagc
 atcagatcac tgcaagtgat gagaagatcg gaagtgcga tatattatga ttacatgat

418	30875	G Protein- Coupled Receptor GPR87/GPR95	NP_076404.1	gtgtaggcct tttattgttt gttggaatcg atatgtacaa agtgaataa aatgtttctt ttcattatcc ttaaaaaaaa aa GLAVWIFFHI RNKTSIFYL KNIIVADLIM TLTFPRIVH DAGFGPWYFK FILCRYTSVL FYANMTSIV FLGLSIDRY LKVRPFQDS RMYSTFTKV LSVCVWVIMA VLSLPIIIT NGQPTEDNIH DCSKLKSPG VKWHTAVTV NSCLFVAVL ILIGYIAIS RYIHKSSRQF ISQSSRRKH NQSIKRVAV FFTCLPYHL CRIPFTSHL DRLLDESAQK ILYYCKEITL FLSACNVCLD PIIFYMCRS FSRLFKKSN ITRSESIRS LQSVRSEVR IYDYTDV ggccttatct ttcactccct ccagcatgct ctgccaccc cagcgcagg tgcactgacc A atgagctca actcctccct cagctgcagg aagagctga gtaatctcac tgaggaggag ggtggcgaag ggggctcat catcaccag ttcatcgcca tcattgtcat caccattttt gtctgctgg gaaactggt catctgggtc acctgtaca agaagtccta cctcctcacc ctcagcaaca agttcgtctt cagctgact ctgtccaaact tctgtctgc cgtgttggtg ctgcctttg tggtagcag ctccatccgc agggaatgga tctttggtg agtgggtgc aacttctctg cctcctcta cctgtgac agctctgcca gcatctaac cctcggggtc attgccatg accgtacta tctgtcctg taccctatc actgcctcat cggctggcctg gggaacccgg ctgtgatgc acttgtctac atctggcttc actgcctcat cggctggcctg ccaccctgt ttggtggtc atcctggag tttagcagat tcaaatggat gtgtgtggt gcttggcacc gggagcctg ctacacggc ttctggcaga tctgtgtgc cctcttccc ttctgtgca tctgtgtg ctatgcttc atctcccg tggccagggt caaggcacgc aaggtgact gtggcactg cgtcatctg gagaggatg ctcagaggag cggagggaag aactccagca cctccacct ctctcaggc agcaggagg atgccttca ggtgtgtgct tactcggcca accagtcaa agcctcctc accatcctg tggctcctcg tgccttcag gtcacctgg gccctacat ggttgtcat gccttgagg cctctggg gaaagctcc gtctcccca gctggagac ttgggccaca tggctgtcct tgccagcgc tgtctgccac ccctgatct atggactctg gaacagaca gtctgcaaa aactactgg catgtgcttt gggaccgggt attatcgga accattgtg caacagaca ggaactccag gctcttcagc atttcaaca ggateacaga cctggcctg tccccacc tcactgcct catggcagg ggacagccc tggggcacag cagcagcac ggggacact gcttcagctg ctccaggac tcagtaacc tgcgtgctt ataagcctc cactgtcgc gtttccctg tgtgtcgtt ccccgtgc gcgttcccc tgtcaggct caagagctgg cggaggggca tttccacgg tg	Homo sapiens
419	31568	G Protein- Coupled Receptor RE2	NM_007369	MSLNSSLSCR KELSNIITEE GEGGVITQ FIAIVITIF VCLGNLVIV TLYKSYLLT P LSNKFVSLT LSNFLLSVL LPFVVTSSIR REWIFGVWC NFSALLYLLI SSASMLTLGV IAIDRYAVL YPMVPMKIT GNRVAMALV IWLHSLIGCL PPLFGWSSVE FDEFKMCVA AWHREGYTA FWQIWCALFP FLMLVCYGF IFRVARVKR KVHCTVIV EEDAQRTRK NSSTSTSSG SRNAPQGV YSANOCKALI TILVILGAFM VTWGPYMWI ASEALWGKSS VSPSLETWAT WLSFASAVCH PLIYGLWKT VRKELGMCF GDRYREPFV QRQTSRLFS ISNRITDLGL SPHLTALMAG GQPLGHSST GDTGSCSQD SGNLRAL atggacacct cccgctcgg tgtgtcctg tcttgcctg tctgtctga gctggcagc A gggggcagct ctccaggct tgggtgtgtg ctgaggggct gccccacaca ctgtcattgc	Homo sapiens
420	31568	G Protein- Coupled Receptor RE2	NP_031395.1		Homo sapiens
421	36534	G Protein- Coupled	NM_003667		Homo sapiens

Receptor
GPR49

gagcccgacg gcagatggtt gctcagggtg gactgctcog acctgggggt ctgggagctg
ccttccaacc tcaggtctt cactectac ctgacctca gtatgaaca catcagtcag
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agaatccact cccgtggaaa gaaatgcttt gatgggtccc acagctaga gactttagat
ttaaattaca ataacttga tgaattcccc actgcaatta ggacacttc caacttaaa
gaactaggat ttcatagcaa caatatcagg tcgatactac aattgttgg gagatctgct
ccttctctta ttacaataca ttctatgac aatcccatcc aattgttgg gagatctgct
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tttctgatt taactggaac tgcaaacctg gagagtctga ctttaactgg agcacagatc
tcattctctc ctcaaacctg ctgcaatcag ttacctaact tccaagtgc agatctgtct
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ttgceatccc taataaagct ggacctatcg tccaacctcc tgtgctcttt tctataact
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accattgcct acaccaagct ctactgcaat ttggacaagg gagacctgga gaattattgg
gactgctcta tggtaaaaca cattgccttg ttgctcttca ccaactgcac cctaaactgc
cctgtggctt tcttgtctt ctctcttcta ataaactta catttatcag tcttgaagta
attaagtta tctcttgtt ggtagtccca ctctctgcat gtctcaatcc cttctctac
atcttgttca atctcactt taaggaggat ctggtgagcc tgagaagca aacctacgtc
tggacaagat caaacaccc aagcttgatg tcaattact ctgatgatgt cgaataacag

304/448

422	36534	G Protein- Coupled Receptor GPR49	NP_003658.1	<p>tcctgtgact caactcaagc cttggttaacc ttaccagct ccagcatcac ttatgacctg cctccaggtt ccgtgccatc accagcttat ccagtgcgtg agagctgcca tcttctctt gtggaatttg tcccatgtct ctaa</p> <p>PSNLSVFTSY LDLSMNNISQ LLPNPLPSLR FLEERLAGN ALTVPKGAF TGLYSLKVLK LQNNQLRHVP TEALQNLRSI QSLRLDANHI SYVPSCFSG LHSRLHILWD DNALTEIPVQ AFRSLSALQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RIHSIGKKCF DGLHSLETLD LNNNLDEFP TAIRTLNLSLK ELGFHSNNIR SIPEKAFVGN PSLLTIHFYD NPIQFVGRSA FQHLPELRTL TINGASQITE FPDLTGTANL ESLTITGAQI SSLPQTVNCQ LPNLQVLDLS YNLLEDLPF SVCKLIQKID LRHNEIYEIK VDTFOQLLSI RSLNLAWNKI AIHPNAST LPSLIKLDLS SNLLSFPIT GLHGLTHLKL TGNHALQSLI SSENFPPELKV IEMPYAYQCC AFGVCEPAYK ISNQWKNKGN SSMDLHKKD AGMFOAQDER DLEDFLLDFE EDLKALHSVQ CSPSPGFKP CEHLIDGWLJ RIGVMTIAVL ALTCLNALVTS TVFRSPLYIS PIKLLIGVIA AVNMLTGVS AVLAGVDAFT FGSFARHGAW WENGVGCHVI GFLSIFASES SVFLLTLAAL ERGSVKYSA KETRAFPSS LKVIILLCAL LALTMAAVPL LGSKYKYGASP ICLPLPFGE STMGYWALI LLNSLCFLMM TIAYTKLYCN LDKGDLENIV DCSMKHIAL LLFTNCILNC PVAFTSFSSL INLTFISPEV IKFILLVVP LPACLNPLLY ILFNPHERED LVSLRKQTYV WTRSKHPSLM SINSDDVEKQ SCDSIQALVT FTSSSITYDL PPSSVPSPAY PVTESCHLSS VAFVPCIL</p>	Homo sapiens
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NM_004736	<p>actagagatg gcggcggggc tgctctgaag agacctcgcg ggcggcggag gagagagaa A gcgcagcgcc gcgcgcgcgc gggcgcccatg tgggagaggag tcggagtcgc tgtgcccgc gccgcctgta gctgctggac ccgagtgga gtagggggga aacggcagga tgaagtcgc cgagcacctc tccgcgcaca tcactccga gtaggaggaag caatacatcc agtatgagcc tttcaaggat atgctgtatt cagctcagga ccaggcacct tctgtggaag ttacagatga ggacacagta aagaggatt ttgccaaagt tgaagagaa tttttccaaa cctgtgaaaa agaacttgc aaaaataca cattttattc agagaagctc gcagaggctc agcgcaggtt tgctacactt cagaatgagc ttcagtcac actgagtgca cagaaagaaa gcactgggtg tactacgctg cgacaacgca gaaagccagt ctccacttg tcccatgagg aacgtgtcca acatagaaat attaaagacc ttaactggc ctccagtga tctacctca gtctaactct gctgcagaac taccagaatc tgaattttac aggttttcga aaaaactga aaagcatga caagatcctg gaaacatctc gtggagcaga ttggcgagt gctcacgtag agtgggcccc attttataca tgcaagaaaa tcaaccagct tatctctgaa actgaggtg tagtgaccaa tgaacttgaa gatggtgaca gacaaaaggc tatgaagcgt ttacgtgtcc cccctttggg agctgctcag cctgcaccag catggaactac ttttagagtt ggcctatatt gtggaatatt cattgtactg aatattacc ttgtgcttgc cgtgtgattt aaacttgaaa cagatagaag tatattggcc ttgataagaa tctatcgggg tggctttctt ctgattgaaat tctttttct actgggcac aacagctatg gtggagaca ggcggagta accatgtac tcactttga acttaacccg agaagcaatt tgcctcatca acatctctt gagattgctg gattcctcgg gatatgtgg tgcctgagcc ttctggcatg ctcttttgc ccaattagtg tcateccac atatgtgat ccacttgccc ttatggatt tatggttttc ttccattatca acccaccac aactttctac tataaatccc gggttttggt gcttaaacgt ctgttcgag tattacagc</p>	Homo sapiens

ccccctccat aaggtaggct ttgctgatt ctggttggtg gatcagctga acagcctgtc
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 tctatttca aaacaagtat ttacttcatt tgccaatcag aggatgtttt aagaacaaa
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424 37498 NP_004727.1 MKFAEHLAH ITPWRKQYI QYEAFKDMLY SAQDQAPSV VTEDTVKRY FAKFEKFFQ P
 TCEKELAKIN TFYSEKLAEA QRREFTLQNE LQSSDAQKE STGVTLRQR RKPVEHLSHE
 ERVQHRNIKD LKLAFFEFYL SLILLQNYQN LNFTGRKIL KKHDKILETS RGADWRVAHV
 EVAPFYCKK INQLISATEA VVTNELEDGD RQKMKRLRV PPLGAAQAPAWTTFRVGLF
 CGIFIVLNI LVLAAVFKLE TDRSIWPLIR IYRGFLLIE FLFLGINTY GWRQAGVNHV
 LIFEINPRSN LSHQHLFEIA GFLGILWCLS LLACFPAPIS VIPTVYVPLA LYGFVFFLI
 NPTKTFYKS RFWLLKLLFR VFTAPFHKVG FADFWLADQL NSLSVILMDL EYMICFYSLE
 LKWDSEKGLL PNNSESGIC HKYTYGVRAI VQCI PAWLRF IQCLRRYRDT KRAFPHLVNA
 GKYSTTFMV APAALYSTHK ERGSDTMVF FYLWIVFYII SSCYTLIWDL KMDWGLFDKN
 AGENTELREE IVYPQAYY CAIIEDVILR FAWTIQISIT STLLPHSGD IATVEFAPLE
 VFRFRVWNFF RLENEHLNNC GEFRVARDIS VAPLNADDQT LLEQMDQDD GVRNRQKNRS
 WKYNQISILR RPRLASQSKA RDTKVLIEDT DDEANT

Homo
 sapiens

425	40881	Lung Seven Transmembran e Receptor 2 (L1USTR2)	AX073578	agagatggca gtgagcgaga ggaggggggt cgcccgcggt agccccggt agtgggggca A gcggctactt ctggtgctgc tgttgggtgg ctgctccggg cgatccacc ggctggcggt gacgggggag aagcgagcgg acatcagct gaacagcttc ggtttctaca ccaatggctc tctggaggtg gagttagcgg tctcgcggt ggcctccgg gagcgagaag agaagtcctc gctggtgggg ttacgtctca gccgggttcg gctggcgaga gtctgctctc attcaaccg ggattccag gactgccc tcagaaaa cagtagcagt tctctggtcc tgttctcat caacaccaag gatcgcagg tccaggtgcg gaagtatgga gacgagaaga cgttgtttat ctttccggg ctctccggg aagcacctc caaacaggg ctcccgaag cacaggccac agtccccg aagtggtg gcggagggac ctctcagc agcaagcca agtcaaac cgagtgatt cagggtctta gtggaagga caagacact gtgtgggc tgagccacct caacaaactc tacaacttca gtttcacgt ggtgatcgg tctcaggcg aagaaggcca gtacagctg aactccaca actgcaaca ttcatgcca ggaaggagc atccattga catcacggtg atgacggg agaagaacc cgatggctc ctgtcgagc cgagatgcc ccttttcaag ctctacatg tcatgtccg ctgcttctc gccgtggca tcttctgggt gtccatctc tgcaggaaca cgtacagct ctctcctct ccacagatc aactactat tcatcaacag ggccttcaac aagacatct ctctcctct ccacagatc aactactat tcatcaacag ccaggccac cccatcgaag ccttgcctg catgtactac atcgacac tgcgaagg cgccctctc ttcatacca tcgctctgat tggctcagg tggccttca tcaagtact cctgtcggat aaggagaaga aggtcttgg gatcgtgat cccatgcagg tctgggcca cgtggctac atcatcatc agtcccgga ggaagcgcc agcactacg tgcgtggaa ggagattttg tctcgtggtg acctcatctg ctgtgtgctc atctgttcc cgtagtctg gtccatccg catctccagg atgcgtcgg cacagacgg aggtggcag tgaacctggc caagctgaag ctgttccgg attactatg catgtctat tgcactgt acttcacccg catcatgcc atctgctgc aggtggctg gcccttccag tggcagtgcc tgtaccagct cttggtagg ggtccacc tggccttct cgtctcag ggtacaaagt tccagccac agggaacaac ccgtacctgc agtgcacca gaggacgag gaggatgtc agatggagca agtaatgacg gactcgggt tccgggaag cctctccaa gtcaacaaa cagccagcg gcggaactg ttatgatc acacatct cagacaaa ggtcgtctc cccagcatt tctcactct gcccttctc cacagctat gtgggaggt ggagggggtc catgtggacc aggcgccag ctccccgga ccccggtcc cggacaagc cattggaag aagatccct tctcccccc aaatattgg cagccctgc ctaccccg gaccacct ccttccagc tatgtgaca ataagacca atctgttg ct	Homo sapiens
426	40881	Lung Seven Transmembran e Receptor 2 (L1USTR2)	CAC28410.1	MAVSERRGLG RGSPAEMGQR LLLVLLGGC SGRHRLALT GEKRADIQLN SFGFTNGSL P EVELSVLRG LREAEEKSLV VGFLSRVRS GRVRSYSTRD FQDCPLQKNS SSFLVFLIN TKDLQVQRK YGEQKTLFIF PGLPEAPSK PGLPKQATV PRKVDGGTS AASKPKSTPA VIQFSGKDK DLVLGLSHLN NSYNFSFHV IGSAEEGQY SLNFHNCNS VPGKEHPDI TVMIREKNPD GFLSAEMPL FKLYMVSAC FLAAGIFWVS ILCRNTYSVF KIHLMALALA FTKISILFHS SINYFINSQ GHPIEGLAVM YYIAHLKGA LLFTIALIG SGWAFIKYVL SDKEKRVFI VIPMQVLAV AYIIIESREE GASDVYVWKE ILFLVDLIC GAILFPVWS IRHLQDASGT DGKVAVNLAK LKLFHYVM VICVYFTRI IAILQVAVP FQWQWLYQLL VEGSTIAFFV LTGYKFOPTG NNPYLQPE DEEDQMEQV MTDSEFREG SKVNKTASGR	Homo sapiens

427	42697	G Protein- Coupled Receptor GPR64	NM_005756	ELL	Homo sapiens
				agccagcccg aggcgcgag cggcagggtg gcacagaggt tctccacttt gttttctgaa A	
				ctcgcggtca ggttggtttt ctctgcagg cagtggtggc atgttggcag aactgaagaa	
				gttttactga gtttcaagat attcttctgc atcatttctc ttcctgtcgt tctggtaaca	
				tccctggaag aagatactga taattccagt ttgtccacc cacttgctaa attatctgtt	
				gtcagtttg cccctctctc caatgaggtt gaacaacaa gcctcaatga tgttacttta	
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 ctgactgtc ttgcaatat ttcttttctg attattttta ttctcttga ttatatgtt
 aaaaataaaa atgttaaaaat caatgaataa aatttgcagt taaga
 428 42697 G Protein- NP_005747.1 MFVSVRQCGR VGRTEVLLT FKIFVILICL HVLTLSLEE DTDNSSLSP PAKLSVVSFA P Homo
 Coupled PSSNEVETTS INDVTLSLIP SNETEKKIT IVKTNASGV KPQNICNLIS SICNDSAFFR sapiens

Receptor GPR64	429	45937	KIAA1624 Protein	AF376725	GEIMFYDKE STVPQNHIT NGTLTGVLSL SELKRSELNK TLQTLSETYF IMCATAEAQS TLNCTFTIKL NNTWNACAAI AALERVKIRP MEHCCCSVRI PCPSSPEELG KLQCDLQDPI VCLADHPRGP PFSSSQSPV VPRATVLSQV PKATSFAPRP DYSPTVHNVP SPIGEIQPLS PQSAPIASS PAIDMPQOSE TISSPMQTH VSGTPPPVKA SFSSPTVSAP ANVNTTSAPP VQTDIWNSS ISDLENQVLQ MEKALSLSGL EPNLAGEMIN QVSRLLHSP DMLAPLAQRL LKVVDDIGLQ LNFSTTISL TSPSLALAVI RVNASFNTT TFVAQDPANL QVSLETQAPE NSIGTITLPS SLMNLPAHD MELASRVQEN FFETPALFQD PSLENLSLIS YVSSSVANL TVRNLTRNVT VTLKHINPSQ DELTVRCVFV DLGRNGRRGG WSDNGCSVKD RRLNETICTC SHLTSEGVLL DLSRVSPLPA QMMALTFITY ICGGLSSIFY SVTLVYIAF EKIRRDYPSK ILIQICAALL LNLVFLDS WIALYKMQGL CISVAVFLHY FLVVSFTWMG LEAFHMYLAL VKVFNTYIRK YILKFCIVGW GVPVAVVTII LTISPDNVGL GSYGKFPNGS PDDEFWINNN AVFYITVGY FCVIFLLNV MFIVVLVQLC RIKKKQLGA QRKTSIQDLR SIAGLTFLLG ITWGEFAFFAW GPNVTFMYL FAIENTLQGF FIFIFYCVAK ENVRKQWRRY LCCGKLRLAE NSDWSKTATN GLKKQTNQO VSSSSNSLOS SSNSTNSTTL LVNDCSVHA SGNMASTER NGVSFSVQNG DVCLHDTGK QHMFNEKEDS CNGKGRMALR RTSKRGSLSHF IEQM gaacaaacat ggcgcctctg gcgcgcctgc gctccccgc ctcgcgcgt cctaggctgg A ccgcgggacct ccgctgctgc ccaatgctgg gttgctgca gttgctggcc gagcctggcc sapiens tgggcccgt ccatcacctg gactcaagg atgatgtgag gcataaagt catctgaaca cctttggctt ctccaaggat gggtacatgg tgggaatgt cagtagcctc tcactgaatg agcctgaaga caaggatgtg actattggat ttgactaga ccgtacaaa aatgatggct ttctctcta cctggatgaa gatggaatt actgtattt aaagaaacag tctgtctctg tcacctttt aatcctagac atctccagaa gtgaggtaat agtaagtct ccaccagaag ctggtaacca gttaccaag atcatcttca gcaggatga gaaagtctt ggtcagagcc aggagcctaa tgttaacct gcttcagcag gcaaccagac ccagaagaca caagatggtg gaaagtctaa aagaagtaca gtgatttcaa agccatggg agagaaatcc tttctgttc ataataatgg tgggagcagtg tcatctcagt tttctttaa catcagcact gatgaccaag aaggccttta cagcttttat ttcatataat gccttggaag agaattgcca agtgacaagt ttacattcag ccttgatatt gagatcacag agaagaatcc tgacagctac ctctcagcag gagaaattcc tctcccaaa ttatacatct caatggcctt tttctctt ctttctggga ccatctggat tcatatcctt cgaacacgac ggaatgatgt attaaatc cactggctga tggcgacctt tctttcacc aagtctctt ccttgggtgt ccattgcaat gactaccact acatctctc ccagggttc cctatcgag gctgggctgt tgtgtactac ataactcacc ttttgaaagg ggcgtactc ttcatcacca ttgcactcat tggcactggc tgggtttca ttaagcacat cctttctgat aaagacaaa agatcttcatt gattgtcatt ccactccagg tcctggcaaa ttagcctac atcatcatag agtcaccga ggagggcacg actgaatatg gcttggtgaa ggactctcta tttctggctg acctgtgtg ttgtgtgccc atctcttcc cagtggtgtg gtcaatcaga catttacaag aagcatcagc aacagatgga aaagctgcta ttaacttagc aaagctgaaa cttttcagac attattacgt cttgattgtg tgttacatat acttcactag gatcattgca tttctctca aactgcctgt tccattccag tggagtggtc tctaccagct cctggatgaa acggccacac tggctctctt tgttctaacy ggtataaat tccgtccggc ttcaataac ccctacctac aactttctca ggaagaagaa gacttggaag
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430	45937	KIAA1624 Protein	AAK57695	<p> tggagtcggt tgtgacaaca tctgggggtga tggaaagtat gaagaaagtc aagaaggtga ccaaaggctc cgtggagccc caggcgaggt ggaaggcgc cgtgtgacag agccgaccc gagatggca ctgtccaagg aaactgttaa cttattcata gtctatttgg acagcagagag cagctctac agtgaactat tggcaccacc gacagtga caagggcaca tggctggagc acagtggcg ggaacctga tttgtactc tctttatg aaacgatctg tggctgttta gaggcagctg gactctctt caggcgggaa tggaggggcg ggcacaggga ggaaggagag aagagaaaag gaagaattca tttttaattt agtttctt ttttcttctt catttcggag ctctaaggtg tatgcagttg tgaccccatg tgtggggaag ttagcaagg acgctggtg gagggggaag gaggtgcga ggtgtctgtc tgatgcttta ggaatgtctt actgaggacc ctggactta agaagaagg cgggagagat gccattgctt gtttgggaga caaaaatgaa cgaacacagg tgactttgga agcaaaagtc aaacccagc ttaggatgta gcaactgccc caggattcct gccctggct tggcccaga ccttattcc agatgctgag agtgaccagg acagcagtc ctgaggccca gtgtcttct tccaacagg aaagaaggc tgtgatgtcg ctgtcaggat catgccctgt ggcacagcac agtggtggtg agtggtgttt ctgactgaga tgttctctga tggatgaaa gaaatgtatt ttaagtta aaagcatba tctgtggcg ttgcttgac atccactcc tgacagcca gacagcact gtctggcttc cttcactgct tgtgctttg ttgtgttga tcagaatttt gggggaatg gaaagttttc ctaaggagc agctgggggc agaattagta gtatttaagc aaataactaa gtccaagcaa atcatccca ttaaaggct tttctgttag gctagttaga aaaaaaaa aaaaa MAALAPVGSP ASRGPRLAAG LRLPMLGLL QLIAEPGLGR VHLLAKDDV RHKVLNFTG P FFKDGVMVN VSSLSNEPE DKDVTIGFSL DRKNDQFSS YLDEVNYSI LKQSVSVTL LILDIRSEV RVKSPPEAGT QLPKILFSDR EKVLQSQSP NVNPSAGNQ TQKTQDGKS KRSTVDSKAM GEKSPSHNN GAVSFQFF NISTDDQEL YSLYFHKCLG KELPSDKFTF SLDIEITERN PDSYLSAGEI PLPKLYISMA FFFLSGTIW IHILKRNRD VFHILWMAA LPFTKSLSV FHAIDYHYS SQGFIEGWA VVYITHLLK GALLFITIAL IGTGWAFIGH ILSDKDKIF MIVIPQLVLA NVAYIIEST EEGTEYGLW KDSLFLVDLL CCGAILFPVW WSIRHLQEAS ATDGKAAIL AKLILFRHY VLIVCYIYFT RIIFLLKLA VPFQWKWLYQ LLDETATLVF FVLTYKFRP ASDNPYLQLS QEEDELMES VVTTSGVMS MKVKVKVTNG SVEPQGEWEG AV </p>	Homo sapiens
431	50847	Neurotensin Receptor type 2	NM_012344	<p> gagtgaagg gagggagcgc cgccgcggg agcgggatgg aaaccagcag ccgcggccc A ccgcggccc gctcaaccc gggcgtgagc ctggcgcgc ggtgggagc gacactcgc ctctggcca aggtctgtt caccgcctc tacgactca tctggcgct ggcgcggcg ggcaatgcgc tgccgtgca cgtgtgtctg aaggcgcgcg cgggcgcgcg gggcgccctg cgccaccag tgctagcct ggcgtcgcg ggcctgctgc tctgctggt cggcgtgcg gtggagctct acagcttct gtggttccac taccctggg tcttcggcga cctgggctgc cggggtact actctgtgca cgagtgtgc gctacgcca cgggtgctgag cgtggcaggc ctgagcgccg agcgtgcct agcgtgtgc cagccctgc gtgccgcgag cctgctgacg ccacgccga cccgtggct ggtggcctc tctgggccc cctgcctcg cctgcgcctg cccatggcg tcatatgg gcagaagcac gaactcaga cggcggaagg ggaagccggg ccgcctcgc gagtgtgac ggtgtggtg agccgaccg cgtcccaag cttatccag gtgaatgtgc tgggtctctt cgtgtctccc ttggcactaa ctgttctct gaatggggtc </p>	Homo sapiens

432	50847	Neurotensin Receptor type 2	NP_036476.1	gctggcacg PSSNPGLSLD ARLGVDTRLW AKVLFTALYA LIWALGAAGN ALSVHVLIKA P RAGRAGRLRH HVLSLALAGL LLLLVGPVE LYSFVWFHYP WVFGLGCRG YFVHELCA ATVLSVAGLS AERCLAVCQP LRARSLTPR RTRMLVALSW AASLGIALPM AVIMQKH ETADGEPEPA SRVCTVIVSR TALQVFIQVN VLVSFVPLA LTAFLNGTVV SHLLALCSQV PSTSTPGSST PSRLELLSEE GLLSFIWKK TFIQGGQVSL VRHKDVRRI SLQRSVQVLR AIVVMVICW LPYHARRIMY CYVDDAWTD PLYNFYHYFY MVTNLFYVS SAVTPLLNA VSSSFRKLFL EAVSSLCGEH HPMKRLPPKP QSPITMDTAS GFQDPPETRT cagagagctt gtatttcagt gcagcctgcc agacctctt tggaggaaga ctggacaaag A ggggteacac attcctcca tacggttag cctcactcg cctggtgctg gtcacagttc agcttcttca tgaatgtgga tcccaatggc aatgaatcca gtgtacata ctctatccta ataggcctcc ctgggttaga agaggtcag ttctggttgg ccttccatt gtgtccctc taccttattg ctgtgctagg taactgaca atcatata ttgtcggag tgagcacagc ctgcatgagc ccatgtatat atttcttgc atgctttcag gcatgacat cctcatctcc acctatcca tgcccaaat gctggccatc ttctggttca attccactac catccagttt gatgcttgc tgctacagat ttctgccatc cactccttat ctggcatgga atccacagt ctgctggcca tggcttttga ccgctatgtg gccatctgtc accactgag ccatgcccaca gtacttaagt tgcctcgtgt caccaaaatt ggtgtggctg ctgtggtgcg gggggtgca ctgatggcac ccttctctgt cttcatcaag cagctgccct tctgcgctc caatacctt tcccatcct actgcctaca ccaagatgtc atgaagctgg cctgtgatga taccgggtc aatgtcgtct atggccttat cgtcatcctc tccgccattg gcctggactc acttctcctc tcttctcat atctgcttat tcttaagact gtgttgggtc tgacacgtga agcccaggcc aaggcatttg gcaactgctg ctctcatgtg tgtgtgtgt tcatattcta tgtaccttc attggatttg ccatgggtga tgcctttagc aagcggcgtg actctccgt gccctcatc ttggccaata tctatctgct gggtcctcct gtgtcctaac caattgtcta tggagtgaag acaaaggaga ttcgacagcg catccttga ctttccatg tggccacaca cgctcagag ccctaggtgt cagtgatcaa acttcttttc cattcagagt cctctgattc agattttaat	Homo sapiens
433	53440	G Protein-Coupled Receptor LS53440	AX107037		Homo sapiens

434	53440	G Protein- Coupled Receptor LS53440	CAC38935.1	<p>gttaacattt tggaagacag tattcagaaa aaaaatttcc ttaataaaaa atacaactca gatccttcaa atatgaaact ggttgaggaa tctocatttt ttcaatatta tttcttctt tgttttcttg ctacataata ttattaatac cctgactagg ttgtggttgg aggtttatta cttttcaatt taccatgcag tccaaatcta aactgcttct actgatggtt tacagcattc tgagataaga atggtacatc tagaacaat ttgccaaagg cctaagcacg gcaaaaggaaa ataaacacag aataataata aatgagataa tctagcttaa aactataact tctcttccag aactcccaac cacattggat ctacagaaaa tctgtctctt aaatgactt ctacagagaa gaaataattt ttctcttga cactagcact taaggggaag attggaagta agccttgaa aagagtacat ttacctacgt taatgaaagt tgacacactt tctgagagt ttccacagca tatggacctt gtttttctta ttaattttt ttaccaacct ttaattagg caaagatatt attagtacc tcattgtagc catgggaaa ttgatgttca tggggatca gtgaattaaa tgggttcata caagtataaa aattaaaaaa aaaaagact tcatgccaa tctcatatga tgtggaagaa ctgttagaga gaccaacagg gtatgggtt agagatttcc agatctttac attttctaga ggaggtattt aattcttct cactcatcca gtgtgtatt taggaatttc ctggcaacag aactcatgac ttaaatccca ctagtattg cttattgtcc tggccaatt gccaatacc tgtgtcttgg aagaagtgt tctagggtt accattatgg agatttctta ttcagaaggt ctgcataagg cttatagcaa gttatttatt tttaaaagt ccataagtgga ttctgatagg cagtgaaggt agggagccac cagttatgat ggaagatag gaatggcagg tcttgagat aacattggcc ttttgagtgt gactcgtagc tggaaagtga ggaatcttc aggaccatgc tttatttggg gctttgtgca gtatggaaca ggaactttga gaccaggaaa gcaatctgac ttaggcatgg gaatcaggca ttttgcttc tggagggcta ttaccaaggg ttaataggtt tcatcttcaa caggatatga caacagtgtt aaccaagaaa ctcaaatc aaatactaaa acatgtgac atatatgtgg taagtttcat ttctttttc aatcctcagg ttccctgata tggattccta taacatgctt tcatccctt ttgtaatgga tatcatatt ggaaatgctt atttaatact tgtatttgc tctggactgt agcccatga gggcactgtt tattattgaa tgtcatctct gtccatcatt gactgctct tgcctcatcat tgaatcccc agcaaatgic ctagaacata atagtgtcta tgcctgacac cggttatttt tcatcaaac tgattccttc tgcctgaac acatagccag gcaattttcc agcctctttt gagtgggta ttattaatatt ctggccatta ctccaatgt gagtgaagt gacatgtgca atttctatac ctggctcata aaacctccc atgtgcagcc tttcatgttg acattaaatg tgacttggga agctatgtgt tacacagagt aaatcaccag aagcctggat ttctgaaaaa actgtgcaga gccaaacctc tgtcatttgc aactccact tgtatttga cgaggcagtt ggataagtga aaaaataagt actattgtgt caagaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa</p> <p>PMYIFLCMLS GIDILISTSS MPKMLAIFWF NSTTIQFDAC LLQMFALHSL SGMESTVLLA MAFDRYVAIC HPLRHATVLT LPRVTKIGVA AVVRGAALMA PLPVIKQLP FCRSNILSHS YCLHQDVMKL ACDDIRNVV YGLIVIISAI GLDSLLISFS YLLILKTVLG LTREAQAKAF GTCVSHVCAV FIFYVPFVIGL SMVHRESKRR DSPLPVILAN IYLLVPPVLN PIVGVKTKKE IRQRILRLFH VATHASEP</p>	Homo sapiens
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435	54053	Gaba (b) Receptor 2	NM_005458	atgtgttccc cgcggaggtc cgggagacca gggcgccgc cgcgcgcgc acgcgcgcc A	Homo sapiens
				gcgcgcctgc tactgtact gctgtctgcg ctgtctgtgc ctctggcgc cggggcctgg	
				ggctgggcgc gggcgccccc cggcgccgcg ccagcagcc cgcgcgtctc catatggcc	
				ctcatgccc tcaccaaga ggtggccaa ggcagcatcg ggcgggtgt gctccccgc	
				gtggaactgg ccactgagca gatccgaac gagtcactcc tgcgcccta ctctctgac	
				ctgcgctct atgacacgga gtgcgacaac gcaaaagggt tgaagcctt ctaagatga	
				ataaaatcg ggcgaacca ctgtgatgtg ttggaggcg tctgtccatc cgtcacatcc	
				atcattgcag agtccctcca aggtggaat ctggtgcag tttctttgc tgcaccacg	
				cctgttctag ccgataagaa aaataccct tattttctt ggaccgtccc atcagacaat	
				gcggtgaatc cagccattct gaagtgtct aagcactacc agtgaagcg cgtgggcacg	
				ctgacgcaag acgttcagag gtctctgag gtgcggaatg acctgactgg agttctgtat	
				ggcgaggaca ttgagatttc agacaccgag agctttccca acgatccctg tacagtgtc	
				aaaaagctga aggggaatga ttgctgcatc atcttggcc agttigacca gaatatggca	
				gcaaaagtgt tctgttgtc atacgaggag aacatgtatg gtagtaataa tcagtggatc	
				attccgggct ggtcagacc ttcttgttg gagcaggtgc acagggaagc caactcatcc	
				gcctgcctcc ggaagaatct gctgtgtcc atggagggtt acattggcgt gaatttcgag	
				ccccctgagct caagcagat caagaccatc tcagggaaga ctccacagca gtatgagaga	
				gagtaacaca acaagcgttc agcgctgggg ccacgaagt tccacgggta cgcctacgat	
				ggcatctggg tcatcgccaa gacactcag agggccatgg agacactgca tgcacgacgc	
				cggcaccagc ggatccagga ctccaactac acggaccaca cgtctggcag gatcatcctc	
				aatgcactga acgagaccaa ctctctcggg gtccagggtc aagtgttatt ccggaatggg	
				gagagaatgg ggaccattaa attactcaa ttccaagaca gcagggaggt gaagttggga	
				gagtaacaag ctgtggccga cacactcag atcatcaatg acaccatcag gtccaagga	
				tcggaaccac caaagacaa gaccatcctc ctggagcagc tgcggaagat ctccctacct	
				ctctacagca tcctctctgc cctcaccatc ctccgggatga tcatggccag tgctttctc	
				ttcttcaaca tcaagaaccg gaatcagaag ctcataaga tgtcagtc atacatgaac	
				aacctataca tctctggagg gatctctcc tatgttcca tattctctt ttgcectgat	
				ggatcctttg tctctgaaa gacctttgaa acactttgca cgtcagggac ctggattctc	
				accgtgggct acagcaccg ttttggggcc atgtttgcaa agacctggag agtccacgcc	
				atcttcaaaa atgtgaaaat gaagaagaag atcatcaagg accagaaact gctttgtatc	
				gtgggggggca tgctgtgat cgacctgtgt atcctgatct gctggcaggc tgtggacccc	
				ctgcgaagga cagtggagaa gtacagcatg gagccgacc cagcaggacg ggaatctcc	
				atccgccctc tcttggagca ctgtgagac acctatga ccatctggct tggcatcgtc	
				tatgcctaca agggacttct catgttgttc ggttgtttct tagcttggga gaccgcacac	
				gtcagcatcc ccgcactcaa cgacagcaag tacatggga tgagtgtcta caactgggg	
				atcatgtgca tcatcggggc cgctgtctcc ttctgacc gggaccagcc caatgtgcag	
				ttctgcatcg tggctctggt catcatcttc tgcagacca tcacctctg cctgttattc	
				gtccgaagc tcataccctt gagaacaaac ccagatgcag ccaacagaa caggcgattc	
				cagttcactc agaatcagaa gaaagaagat tctaaaacct ccacctgggt caccagtgtg	
				aaccaagcca gcacatccc cctggagggc ctacagtcag aaaacctcg cctgcgaatg	
				aagatcacag agctggataa agacttggaa gaggtcaca tgcagtctga ggacacacca	

436	54053	Gaba (b) Receptor 2	NP_005449.1	<p>gaaaagacca cctacattaa acagaaccac taccaagagc tcaatgacat cctcaacctg</p> <p>ggaaacttca ctgagagcac agatggagga aaggccattt taaaaataca cctcgatcaa</p> <p>aatccccagc tacagtggaa cacaacagag cctctcgcga catgcaaaaga tcttatagaa</p> <p>gatataaact ctccagaaca catccagcgt cggtctgtccc tccagctccc catcctccac</p> <p>cacgcctacc tcccattccat cggaggcgtg gacgcagct gtgtcagccc ctgcgtcagc</p> <p>cccaccgcca gcccccgcca cagacatgtg ccacctcct tccagtcacat ggtctcgggc</p> <p>ctgtaa</p>	Homo sapiens
437	55728	ETL protein	NM_022159	<p>IMPLTKEVAK GSIGRGVLPA VELAIEQIRN ESLRPFYELD LRLYDTECDN AKGLKAFYDA</p> <p>IKYGNHLMV FGGVCPSTVS IIAESLQGNV LVQLSFAATT PVLADKKKYP YFFRTVPSDN</p> <p>AVNPAILKLL KHYQWKRVTG LTQDVQRFSE VNLDLTGLVY GEDIEISDTE SFSNDPCTSV</p> <p>KKLKGNDVRI ILGQFDQDMA AKVFCAYEE NMYGSKYQWI IPGWYEPSWW EQVTEANSS</p> <p>RCLRKNLLAA MEGYIGVDFE PLSSKQIKTI SGKTPQOYER EYNNKRSVG PSKFHGYAYD</p> <p>GIWVIAKTLQ FQDSREVKVG RHQRIQDFNY TDHTLGRILL NAMNETNFFG VTQGVVFRNG</p> <p>ERMGTIKFTQ FQDSREVKVG EYNAVADTLE IINDTIRFOG SEPPKDKTII LEQLRKISLP</p> <p>LYSIISALTI LGMIMASAFI FFNKRNQK LIKMSPPYMN NLIILGGMLS YASIFLFLGLD</p> <p>GSFVSEKTFE TICTVTRWIL TVGYTTAFGA MFAKTRVHA IFRNVKMKKK IIKDQKLLVI</p> <p>VGGMLLIDLC ILICWQAVDP LRRTEKYSM EPDPAGRDIS IRPLLEHCEN THMTIWLIV</p> <p>YAYKGLMLF GCFLAWETRN VSIPALNDSK YIGMSVYVNG IMCIIGAASV FLTRDQPNVQ</p> <p>FCIVALVIF CSTITLCLVF VPKLITLRTN PDAATQNRRE QFTONQKKED SKTSTSVTSV</p> <p>NQASTSRLEG LQSENHRLRM KITELDKLE EVTMQLQDTP EKTYYIKQNH YQELNDILNL</p> <p>GNFTESTDGG KAILKNHLDQ NPQLQWNTTE PSRTCKDPIR DINSPEHIQR RLSLQLPILH</p> <p>HAYLPISGGV DASCVSPCVS PTASPRHRV PPSFRVMVSG L</p> <p>gtgaaattta aactccagtc ctgtggcgaa aatgctaatt gcactaacac agaaggaagt A</p> <p>tattattgta tgtgtgtacc tggcttcaga tccagcagta accaagacag gtttatcact</p> <p>aatgatggaa ccgtctgtat agaaaatgtg aatgcaaaact gccatttaga taatgtctgt</p> <p>atagctgcaa atattaataa aactttaaca aaatctgtg acagatcttt caccacaaga tataattaca</p> <p>ttgctacaag aagctctatag aaatctgtg ttactaggtt acaagaacaa cactatctca</p> <p>tatatagaa tattagctga atcatctca ctcaactctt actgaatttg taaaaccgt gaataatttt</p> <p>gccaaagaca cctttctaa ctcaactctt agtttggag aagttatctg tgaatcatag gagaacacat</p> <p>gttcaagggt atacatttgt agtttggag aagttatctg tgaatcatag gagaacacat</p> <p>cttacaacac tcatgcacac tgttgaacaa gctacttaa ggatattcca gagcttccaa</p> <p>aagaccacag agtttgatac aaattcaacg gatatagtc tcaaaagttt ctttttgat</p> <p>tcataaaca tgaacatat tcatctcat atgaatatgg atggagacta cataaatata</p> <p>tttccaaga gaaaagctgc atatgattca aatggcaatg ttgcagttgc attttatat</p> <p>tataagagta ttggtccttt gctttcatca tctgacaact tcttattgaa acctcaaaat</p> <p>tatgataatt ctgaagagga ggaagagtc atatttccag taatttcagt ctcaatgagc</p> <p>tcaaacccac ccacattata tgaacttgaa aaataacat ttacattaa tcacgaaag</p> <p>gtcacagata ggtataggag tctatgtgca ttttgaatt actcacctga taccatgaat</p> <p>ggcagctggt ctccagaggg ctgtgagctg acatactca atgagaccca cacctcatgc</p> <p>cgctgtaac acctgacaca ttttgcaatt ttgatgtcct ctggtccttc cattggtatt</p>	Homo sapiens

438	55728	ETL protein	NP_071442.1	MCVPGFRSS NQDRFITNDG	TVCIENVNAN CHLDNVCIAA NINKTLTKIR SIKEPVALLQ P	Homo sapiens
				EVYRNSVTDL SPTDIITYIE	ILAESSLLG YKNNTISAKD TLSNSTLTFE VKTVNNFVQR	
				DTFVVDKLS VNHRRHLTK	LMHTVEQATL RISQSFQKTT EFDTNSTDIA LKVFFFDSYN	
				MKHHHPHMM DGDYINIFPK	RKAAYDSNGN VAVAFLYYKS IGPLSSSDN FLKPQNYDN	
				SEEEERVISS VISVSMSSNP	PTLYELEKIT FTLSHRKVTD RYRSLCAFWN YSPDTMNGSW	
				SSEGCETYS NETHTSCRN	HLTHFAILMS SGPSIGIKDY NILTRITQLG IISLICLAI	
				CIFTFFFE IQSTRTIHK	NLCCSLFLAE LVFLVGINTN TNKLFCSIIA GLLHYFFLAA	
				FAWMCIEGIIH LYLVVGVII	NKGFLHKNFY IFGYLSPAVV VGESAALGYR YYGITKVCWL	
				STENNEFIWSF IGPACLIILV	NLLAFGVIIY KVRFRHTAGLK PEVSCFENIR SCARGALALL	
				FLGLTWTWIFG VLVVHVASV	TAYLFTVSNA FQGMFIFLFL CVLSRKIQEE YRLEFNVPVC	
				CFGCLR		
439	56923	Muscarinic acetylcholin e Receptor M3	NM_000740	atgaccttgc acaataacag	tacaacctcg cctttgtttc caaacatcag ctcctcctgg A	Homo sapiens
				atacacagcc cctcctgatgc	agggtgccc ccggaacccg tcactcaatt cggcagctac	
				aatgtttctc gagcagctgg	caatttctcc tctccagacg gtaccaccga tgacctctg	
				ggaggtcata ccgtctggca	agtggtcttc atcgcttctc taacgggcat cctggccttg	
				gtgaccatca tcggcaacat	cctggtaatt gtgtcaatta aggtcaacaa gcagctgaag	

440	56923	Muscarinic acetylcholin e Receptor M3	NP_000731.1	acggtcaaca actacttctt ctttaagcctg gctgtgtgccc atctgattat cgggggtcatt tcaatgaatc tgtttacgac ctacatcatc atgaatcgat gggccttagg gaacttgccc tgtgacctt ggcttgccat tgactacgta gccagcaatc cctctgttat gaacttcttg gtcatcagct ttgacagata cttttccatc acgagccgc tcaagtaccg agccaaacga acaacaaga gagcgggtg gatgatcggg ctggcttggg tcatctctt tgcctttgg gctctgcca tctgttctg gcaatacttt gttgaaaga gaactgtgccc tceggagag tgcttcatc agttctcag tgagcccacc attactttt gcacagccat cgtgtctttt tatacgctg tcaccattat gactatttta tactggagga tctataagga aactgaaaag cgtaccaag agcttgctg cctgaagcc tctgggacag aggcagagac gaaaacttt gtccaccca cgggagttc tcgaagctgc agcagttacg aactcaaca gcaagcatg aaacgtcca acagaggaa gtatggcgc tgcactttt ggtcacacac caagagctg aaaccagct ccgagcagat ggaccaagac cacagcagca gtgacagttg gaacaacat gatgtgtg cctccttga gaactcgc tctccgagc aggagacat tggctccgag acgagacca tctactccat cgtgtccaag ctccgggtc acgacacat cctcaactcc accaagttac cctcatcgga caactgcag gtgctgagg aggagctgg gatggtggac ttggagagga aagccgacaa gctgagccc cagaagagc tggacgatgg aggcagttt ccaaaaagct tctccaagct tcccatccag cttagatcag ccgtggacac agctaaagact tctgacgtca actctcagt gggtgaagc acggccactc tactctgtc ctcaaggaa gccactctgg ccaagaggtt tgcctgaag accagaagtc agatactaa gcgaaaaag atgtccctgg tcaaggagaa gaaagcgccc cagacctca gtgcgatctt gcttgccttc atcatcact ggaccacata caacatcatg gttctgtgta acacttttgc tgacagctgc ataccaaaa ccttttggaa tctgggtac tgggtgtct acatcaacag caccgtgaac cccgtgtgct atgtctgtg caaaaaaca ttcagaacca ctttcaagat gctgtgtgctg tgccagtg acaaaaaa gaggcgcaag cagcagtagc agcagagaca gtcggtcatt tttcaaacg gcgcaccga gcagccttg tag	Homo sapiens
441	57180	Leukotriene B4 Receptor BLTR2	NM_019839	GGHTVWQWF IAFLTGIL VTIIGNILVI VSEKVNKQLK TVNNYLLSL ACADLIIGVI SMNLFTYII MNRWALGNLA CDLWLADIVY ASNAVNNLL VISFDRYFSI TRPLTYRAKR TTKRAGVMIG LAWVISFLW APAILFWQYF VGRRTVPPGE CFIQLSEPT ITFGTAIAAF YMPVTIMTIL YWRIYRETEK RTKELAGLQA SGTEATENE VHTGSSRSC SSYELOQQSM KRSNRRKYGR CHFWFYTKSW KPSSEQMDQD HSSSDSWNNN DAAASLENSA SSDEEDIGSE TRAIYSIVLK LPHSTIINS TKLPSSDNLQ VPPEELGMVD LERKADKLQA QKSVDDGGSF PKSFSKLPIQ LESAVDTAKT SDVNSSVGKS TATLPLSFKE ATLAKRFALK TRSQITKRKR MSLVKEKKA QTLSAILLAF IITWTPYIM VLVNTECDSC IPKTFWNLGY WLCYINSTVN PVCYALCNKT FRTTFKMLL CQCDKKRRK QYQQRQSVI FHKRAPEQAL gaaactggcc ctggccctga accaaatacc ttgaaccctc gtaaacctca taccctgacc A cccttgttt ggataatccc aggtagaaca actctctc actgtctgt gtgagatatac gctgtagccc actcattaag tacattctcc taataaatgc ttgactga tcacctgccc agtctttgt ctgggcaat ctatacttt ctgagaggtt cccaaggcct actgaagga cttaacatac tottaatggc ttctctctct ctgtttttac cttatgacct cacttctga gttaacctcc caaatacagg atcaactgta cccaagccct tagctcaaga atacaggatc	Homo sapiens

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442	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	MAPSHRASQV GFCPTPERLP WRLPPTCRPR RMSVCYRPPG NETLLSMKTS RATGTAFLLL P AALLGLPGNG FVWWSLAGWR PARGRPLAAT LVHLHALADG AVLLLTPLFV AFLTRQAWPL GQAGCKAVYV VCALSMSYASV LLTGLLSLQR CLAVTRPFLLA FRURSPALAR RLLAVWLAA LLLAVPAAYV RHLWRDVRQ LCHPSVHAA AHLSELTFTA FVLFFGLMLG CYSVTILARLR GARWGSGRHG ARVGRLVSAI VLAFLGLWAP YHAWNLLQAV AALAPPEGAL AKLGGAGQAA RAGTTALAFF SSSVNPVLVY FTAGDLLPRA GPRFLTRLFE GSGEARGGGR SREGTMEIURT TPQLKVVQGG RGNDDPGGGM EKDDPEWDL	Homo sapiens
443	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSRI/Flam ingo)	NM_014246	atggcgccgc cgcgcgcgc cgtgctgccc gtgctgtctgc tccctggcgc cgcgcgcgcgc A ctgcgcggga tggggctgctgc agcgccgcgc tgggagccgc gcgtaccgcgc cgggaccgcgc gccttcgccc tccggcccggt cgtacacctac ggggtgggcgc cagcttgac cccccgggcgc ccgcgggagc tgcctgacgt gggccgcgat gggccggctgg caggacgtgc gcgcgtctcg ggcgccgggc gccgcctgcc gctgcaagtc cgttggtggt cccgcagtgc cccgacgggc ctgagccgcgc gccctgcggc gcgcacgcac cttcccggt gcggagccgc tgcgccgctc tgcggaacgc gtcccggtct ctcgggggcgc cctgcttcc cctccccgcgc cggctgcgcgc gccgcgcagc attcgcgct cgcagctccg accaccttac cgcctgcgcgc ctgccccgcgc ctgcgtcgc tgtgcgcctt cggcgccgcgc gctggccgcgc tccgggtgggc actggcgctg gaggcgcgca ccgcgggggac gccctccgcgc tgcgcacctc catcgccgcgc cctgcgcgcgc aacttgcccgc aagcccgccgc ggggcgcggc gcacggggccc ggcgggggcac gagcggcaga gggagcctga agttcccat gcaacacacac cagctggcgc tgtttgagaa cgaacccggcg ggcaccctca tccctccagct gacgcgcac tacacctacg agggcgagga ggagcgcgtg agctattaca tggaggggct gttcgacgta cttgccccgc gctacttcg aatcgactct gccacgggcgc ccgtgagcac ggacacgta cttgacccgc agaccaaggga gacgcacgtc ctcagggtga aagccgtgga ctacagtac cgcgcgcgcgc cgcgcacacac ctacatcact gtcttggtca aagaccacca cgcacacagc ccggtcttctc agcagtcgga gtaccgcgag cgcgtgcggg agaacttga ggtgggtac cgcgtgttac cgcgtgttg gggcgcgctg ggacgtctc gactcgccca tcaagcccaa cttgcgttac cgcgtgttac ccatccgcgc cagcgaccgc cagctcaacg agagctcttg cgtggtgagc acacgggcgc tgcgggacgc ggaggaggcg gccgagtacc agctcttgtt ggaggccaac gaccagggc gcaatccgggc ccgctcagt gccacggcca ccgtgtacat cgaggtggag gacgagaacg acaactacc ccagttcagc gagcagaact acgtggtcca ggtgcccgag gacgtggggc tcaacacggc tgtgctgca gtgcaggcca cggacccgga ccaggccag aacgcggcca ttcactacag catcctcagc gggaacgtgg ccggccagtt ctacctgac tgcctgagcg ggatcctgga tgtgatcaac cccttgatt tcgaggatgt ccagaatac tgcctgagca ttaaggccca ggaagggggc cggccccgc tcataattc ttcagggtg gtgtctgtgc aggtgctgga tgtcaacgac aacgagccta tcttgtgag cagcccttc caggccacgc tgcggagaa tgtgccccg ggctacccgc tgggtgacac tcaggcggtg gacgcgact ctggagagaa cgcgcggctg cactatcgcc tgggtgacac ggctccacc tttctggggg gcgcagcgc tgggcctaaag aatcctgccc ccaccctga cttcccttc cagatccaca acagctccgc ttggatcaca gtgtgtgccg agctggaccg cgaggagggt gagcaactaca gcttcgggtt ggagcggtg gaccacggct cggcccccat gagctcctcc accagcgtgt ccatcacggt gctggacgtg	Homo sapiens

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tccctcagc agtggaact gccggaact ttgtccatt ccttagtag cctgcccag
cctagatggg cagttttgt ctttccaa atttaggac tttttttt tgcattatt
tcttcagtt tctttcttg cactgatct tctctctc tctgtgact ccagtgact
agacgttaga cctctgatg tttccact ggtccctgag gctctgtc
PRELLDVGRD GRLAGRRVS GAGRLPLQV RLVARAPTA LSRRLRARTH LPGCCARAL
CGTGARLGA LCFVPGGCA AAQHSALAP TTLPACRCP RPRPCGRP ICLPPGGSVR
LRLLCALRA AGAVRGLAL EAATAGTSPA SPSPPLPP NLPEARAGPA RRARGTSGR
GSLKFPMPNY QVALFENEPA GTLLQLHAH YTIEGEERV SYMGLFDE RSRGYFRIDS
ATGAVSTDSV LDRETKEHV LRKAVDYST PPSATTYIT VLKVDNDHS PVFEQSEYRE
RVRENLEVG YEVLTIRASDR DSPINANLRY RVLGAWDV FQNESSGVVS TRAVLDREA
AEYQLLVEAN DQGRNPGPLS ATATVYIEVE DENDNYPQFS EQNYVQVPE DVGLNTAVLR

Homo
sapiens

444 73584 Cadherin EGF NP_055061.1 MAPPPPVP VLLLLAAAA IPAMGLRAA WEPRVGGTR AFALRGCTY AVGAACPRA P

LAG Seven-
Pass G-Type
Receptor 1
(CELSR1/Flam
ingo)

VQATDRDQGG NAAIHYSILS GNVAGQFYLH SLSGILDVIN PLDFEDVQKY SLSIKAQDGG
RPPLINSSGV VSVQVLDVND NEPIFVSSPF QATVLENVPL GYPVVIQAV DADSGENARL
HYRLVDAST FLGGSGAGPK NPAPTPDFPE QIHNSGMIT VCAELDREEV EHSFGVEAV
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LVSRAITVHIL LVDQNDNPPV LPDFQILEFN VYTNKNSPV TGVIGCIPAH DPDVSDSLNY
TFVQGNELRL LLLDPATGEL QLSRDLNDR PLEALMEVSU SDGHSVTAF CTLRVTIITD
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VLREFSSAPF LSSTTVLFRP IHPINGLRCR CPPGFTGDYC ETEIDLCYSY PCGANGRCRS
REGGYTCECF EDTGHECEV DARSRCANG VCKNGGTCVN LLIGGFHCVC PPGEYERPYC
EVTTRSFPQ SFVTFRGLRQ RHFHTISLTF ATQERNGLLL YNGRENEKHD FIALEIVDEQ
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VSFPADFFRP PEEKEGPLL RAGRRTPPQT TRPGPTERE APISRRRHP DDAGQFAVAL
VIYRTLGQL LPERYDPRR SLRLPHRPII NTPMVSTLVY SEGAPLPRPL ERPLVEFAL
LEVEERTKPV CVFWNHSIAY GGTGWSARG CELLSNRNTH VACQCSHTAS FAVLMDISRR
ENGEVLPIKI VTYAAVSLSL AALLVAFVLL SLVRMLRSNL HSIKHHLAVA LFLSQLVFI
GINQENPFL CTVAAILLHY IYMSTFAWTL VESLHVYRML TEVRNIDTGP MRFYVVGWG
IPAIVTGLAV GLDPQGYGNP DFCWLSLQDT LIMSAGPIG AVIINTVTS VLSAKVSCQR
KHYYGKKGI VSLRRTAFLL LLLISATWLL GLLAVNRDAL SFHYLFAIFS GLQGFVLLF
HCVLNQEVK HLGVLGGRK LHLEDSATTR ATLITRSINC NTFEGDGPDM LRTDLGESTA
SLDSIVRDEG IQKLGVSSGL VRGSHGEPDA SIMPRSKDOP PGHDSDSSE LSLDQSSSY
ASSHSDSED DGVGAEEKWD PARGAVHSTP KGDVANHVHP AGWPQOSLAE SDESPSGPK
RLKVTKVSV ELHREEQGS RGEYPPDQES GGAARLASSQ PPEQRKGILK NKVTYPPPLT

445	74514	5-HT5A Receptor	NM_024012	TGSAQADGSD	SEKP	LTEQTLKGRLL REKLADCEQS PTSSRTSSLG SGGPDCAITV KSPGREPRGRD HLNGVAMNVV
446	74514	5-HT5A Receptor	NP_076917.1	MDLPNLTSTF SLSTPSPLET NHSLGKDDLR SMAVSDVLVA FHRVPLNLVA NVTALALDRY WSITRMEYT LRTKCVSNV MIALTWALSA VISLAPLLFG WGTYSEGSE ECQVSREPSY AVFTVGAFY LPLCVLIFY WKIYKAAKER VGSRTNSVS PISEAVEVKD SAKQPQMVFT VRHATVTFQP EGDWTREQKE QRAALMVGIL IGVFVLCWIP FFLELISPL CSCDIPAIWK SIFNLWGSYN SFFNPLIYTA FNKNYNSAFK NFFSRQH	atggatttac cagtgaaact aacctctttt tccctctcca ccccctccc tttggaagacc aaccaagcc tcggcaaga cgacctgcg cccgctctc ggctctctc gtggcgcgga cgctgcctg gaacctgctg gtgctgttcg tgtaacgca tccaccccg tgctgcctc cctgcctgcg tctcgatgt cctggtggcc ggcgtgctg ggcgccgctg gcagctaggt cgagggctgt ccagctttt gategcgtgc gacgtgctt gtgcacggc cagcatctg ggaatacac gtccgcacc gcaatgctg ctccaacgtc atgatcgcc tcacctggc actctcgt gtcatctc tgcccgct gcttttggc tgggagaga cgtactctga gggcagcgag gagtgcagg taagcgcg gccttctac ctgcgctct gtgtgtgt cttcgtgtac tggaagatc acaaggctc caagtccg gtggctcca ggaagacca tagcgtcca cccatatcc aagctgtga gttgaggac tgtgcaaac agcccgat gggttccac gtccgccac ccacgtcac cttcagcca gaagggaca cgtggcgga gcagaaggag cagcgggcg ccctcatgt gggcactc attggctgt tcgtgctct ctggatcccc ttctttcca ccgagctcat cagtcctc tgctctgt acatccgc catctggaaa agcatcttc tgtggcttg ctactcaac tctcttta acccctgat ctatacggt ttcaacaaga actacaacag cgctctta aacctctt ctagcaaca ctga	
447	81765	Thromboxane A2 Receptor	NM_001060	FLATILRVRT FHRVPLNLVA SMAVSDVLVA NVTALALDRY WSITRMEYT LRTKCVSNV MIALTWALSA VISLAPLLFG WGTYSEGSE ECQVSREPSY AVFTVGAFY LPLCVLIFY WKIYKAAKER VGSRTNSVS PISEAVEVKD SAKQPQMVFT VRHATVTFQP EGDWTREQKE QRAALMVGIL IGVFVLCWIP FFLELISPL CSCDIPAIWK SIFNLWGSYN SFFNPLIYTA FNKNYNSAFK NFFSRQH	gtaatgcaga gataataaac ctctctaggt ctataaatt tataaact taataaccta aacatggtat acaaattct ccaaaccca taacataatt taagtttcaa aaagtctccc aaactttcaa gttagatttt attgctttga tgagtggctt taaatatgaa aagcttggcc tgtgaaggcc aatccttttc cgtggactg ggatctatag aaatacagaa atgtgccag gggttcatct ccctaataac catcattcac atttctaac ctcccfaata accagccacc atgtgagaag gatccacagt tactgtttat gactataatt aactagctac tggtcctgag gagtcctgag atagctcttc gctcgggc atacccccta atctgtgtca gctgattatg agccagtaag taattccctg cgtcgggc atctgtgtca gctgattatg atggtatata cccaacaga tcttaggaat ggagagctct tagcaaggcc ctccaatgtg aaggtcaaca cagtcactgt gatcgtgta tttccatttt gtaaaagcat atctctggg gtcattttta tcttctaact ttattggaaa agtcctctgt tttggggggc cgccctctcc cacagccaga ctgactcagt ttccctggga ggtcccgctc gagccgtct ttccctccc tctgcccgcc cccagccctc gcccacccct cgccgcgcgc acatctgctc gctcagctcc agacggcgcc cggaccccc ggcggggat ccagccaggt gggagcccc cagatgaggt	

448	81765	Thromboxane A2 Receptor	NP_001051.1	ctctgaaggt gtgcttgaac cagtgcacg ctgctctgtc tgcagcatcg gctgatggtg gtggtgactg atccctcagg gctccgagc catgtggccc aacggcagtt ccttggggcc ctgtttccgg ccacaaaca ttacctgga ggagagacgg ctgctgcctt cgcctgtgtt cgccctcc ttctgctggt tggcctggc ctcaacctg ctggccctga gctgctggc ggcgccgg caggggggtt cgcacacgg ctctctctc ctcaacctc tctgctgctt cgtctcac gacttctg ggctgctgtt gacggatcc atcgtgtgtt cccagcacg cgctcttc gagtgcacg ccgtgaccc tggctggcgt ctctgtcgt cctcagagcg cgtcatgac ttcttcggc tgtcccgct gctgctggg gccgccatgg cctcagagcg ctacctggt ataccggc ccttctcgg ccggcggtc gctcgcagc gccgcgctg ggccacgtg gggctggtt ggcgcccg gctggcgctt ggtcgtctg ccttctggtg cgtggctgc tacacgtgc aataccggg gctcgtgtg tctcgtacg tggcgccga gtccggggac gtggccttc ggctgctct ctccatgctt ggcggcctt cgtcgggt gtcttctc ctgaacacgg tcagcgtggc cactctgtc cactctacc acggcagga ggcgcccg cagctcccc gggactccga ggtggagatg atggctcagc tcctggggat catggtgtg gccagcgtt gttggtgct cctctgtgtt ttcatgtccc agacagtct gcgaaccc cctgcatga gcccgcgg gcagctgtc cgcaccagc agagagact gtctctac ttgctgtg gctcgtccca gctcgtctc agaccggc ccaggtcgt gtccgcgc cccgtgtct cgcagcgtc cggctgtcag taggaagtgg acagagcgc gtccctcag cccagctca cgcagcgtc cggctgtcag taggaagtgg acagagcgc cctccgcg ctctccgg agccctggc cctcgtgaca gccatctgc ctgttctgag gattcaggg ctgggggtg tggatggaca gtgggcatca gcagcaggtt ttgtgttga cccaatcca accggggg ccccaactc tccctgatcc tttaccacg cactctcct tctcggccc ctttttccc tccagagctc ccaccctc tctcgtccc tcccaacccc aggaaaggca tgcagacatt ggaagagggt cttgcattgc tatttttt tttagacgga gtctgtct gtcccccagg ctggagtga gggcgcaat ctcagctcac tgaacctcc acctccgg ttcaagcgt tctcctgct cagctcctg agtagctgg actataggcg cgcgccaca gcccggcta attttgtat ttttagtaga gacgggttt caccgtgtg gccaggtgg tctgaactc ctgacctcag gtgattcacc agcctcagc tcccaagt ctgggatac aggcataaac caccacact ggcattttt tttttttt tagacggagt ctcactctg gcccagcct ggagtacagt ggcagatct cggctcactg caacctccg ctcccggt caagcattc tctgctca gctcccgag cagctgggat tacagcgta agccactg cccggcctt catgctctt gacctgaat ttgacctact tgcgtgggta cagtgcttc ctttgaacc tccacaggg aagcctctgt ccagaaagga ttgaatgta aacgggggca cccctttt ttgcaaaa atactctgc ctttggttt at SSFLTFLGL VLTDFGLLV TGTIVSQHA ALFEWHAADP GCRLCRFMGV VMIFGLSPL LIGAAMASER YLGITRFSR PAVASQRAW ATVGLWAAA LALGLPLLG VGRYTVQYPG SWCFLTGAE SGDAFGLLF SMIGLSVGL SFLNTVSA TLCHVYHQE AAQQRDSE VENMAQLGI MVASVCWLP LILVIAQTVL RNPPMSPAG QLSRTEKEL LIYLRVATWN QILDPMVYIL FRAVLRLQ PRLSTRPSL SLQPLQRS GLQ	Homo sapiens
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449	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NM_005283	atggagtcct caggcaaccc agagagcacc accctttttt actatgacct tcagagccag A ccgtgtgaga accaggcctg ggtctttgct accctggcca ccactgtcct gtactgcctg gtgtttctcc ttagcctagt gggcaacagc ctggtcctgt gggctctggt gaagtatgag agcctggagt cctcaacaa catcttcate ctcaacctgt gcctctcaga cctgggtgtc gctgtgtgt tgctctgtg gatctccca taccactggg gctgggtgct gggagacttc ctctgcaaac tctcaatat gatcttcc atcagctct acageagcat ctcttccctg accatcatga ccatceaccg ctacctgtcg gtatgagcc cctctccac cctggcgctc ccacccctcc gctgcgggt gctggtgacc atggctgtgt gggtagccag catcctgtcc tcacatctcg acaccatctt ccacaagtg cttctctcg gctgtgatta ttccgaactc acgtgttacc tcacctcgt ctaccagcac aacctcttct tctgtgtgc cctggggatt atcctgttct gtaactgga gatcctcagg accctgttcc gctcagctc caagcggcgc caccgcagg tcaagctcat cttgccatc gtggtggcct acttctcag ctggggtccc tacaacttca cctgtttct gcagagctg ttccggaccc agateatccg gagctgcgag gccaaacagc agtagaata cgccctgtc atctgcgcga acctcgctt ctccactgc tgcttaacc cgtgtctta tgtctctg ggggtcaagt tccgcacaca cctgaaacat gttctcggc agtctggt ctgcccgtg caggcaacca gccagcctc gatccccac tcccctggg ccttgccta tgaggcgcc tcttctact ga 1 MESSGNPEST TFFYDLSQ PCENQAWVFA TIATTVLYCL VFLLSLVGN LVLWLVLKYE P SLESNTNIFI LNLCLDLVF ACLLPWISP YHWGVUGDF LCKLNMIFS ISLYSIFFL TIMTHRYLS VVPSLTLRV PTLRCRVLT MAVWVASILS SILDTHFKV LSSGCDYSEL TWYLTSVYQH NLFFLLSLGI ILFCYVEILR TIFRSKRRT HRTVKLIFAI VVAYFLSWGP YNFTLFQTL FRTQIIRSC AKQOLEYALL ICRNLAFSHC CFNPVLYVTV GVKFRTHLKH VLRQFWFCRL QAPSPASIPH SPQAFAYEGA SFY gogatggcga tgatgcctct agtccctcat catccagagc ggcaggcgag ctggggctccg A gactgcgaga tggaggagg ggcgcctgcg goaccggcca ggcttatctg tcttgggctt ctttgtcac atattgtca tctgtgact gaggcctga ctacactagt atttttgggg agcagaagaa ggagacattt ctctccgaaa atgaactcaa caggccacct tcaggatgcc cccaatgcc cctcgtctca tgtgcctcac tcacaggaag gaaacagcac ctctctccag gagggtctt aggatctcat ccacacagc accttggtga cctgtacttt tctactggcg gtcatcttct gctgggttc ctatggcaac ttcatgtct tcttgcctt cttegatcca gccttcagga aattcagaac caacttbgat tcatgatcc tgaacctgtc ctctgtgac ctcttcattt gtggagtgc agcccccatg ttacactttg tgttatctt cagctcagcc agtatgctc cggatgctt ctgcttcat ttccatctca ccagttcagg ctctcatc atgtctctga agacagtgc agtatgcgc ctgcaacggc tccggtatgtt gttgggaaa cagcctaate gcacggctc ctttccctgc accgtacttc tcacctgct tctctggcc accagtttca ccttgcac ctggctacc ttgaaaacca gcaagtccca cctctgtctt cccatgtcca gtctgattgc tggaaaaggg aaagccattt tgtctctcta tgtgtcgac ttacacttct gtgtgtgtgt ggtctctgtc tcttaacatca tgattgtctc gacctgcg aagaacgctc agtcagaaa gtgccccct gtaatacag tcatgtctc cagaccacag cctttcatgg ggtccctgt gcaggaggt ggagatccca tccagtgtc catccggct ctgtatagga accagaatta caacaaactg cagcacgttc agaccgttg atatacaag	Homo sapiens
450	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NP_005274.1	atggagtcct caggcaaccc agagagcacc accctttttt actatgacct tcagagccag A ccgtgtgaga accaggcctg ggtctttgct accctggcca ccactgtcct gtactgcctg gtgtttctcc ttagcctagt gggcaacagc ctggtcctgt gggctctggt gaagtatgag agcctggagt cctcaacaa catcttcate ctcaacctgt gcctctcaga cctgggtgtc gctgtgtgt tgctctgtg gatctccca taccactggg gctgggtgct gggagacttc ctctgcaaac tctcaatat gatcttcc atcagctct acageagcat ctcttccctg accatcatga ccatceaccg ctacctgtcg gtatgagcc cctctccac cctggcgctc ccacccctcc gctgcgggt gctggtgacc atggctgtgt gggtagccag catcctgtcc tcacatctcg acaccatctt ccacaagtg cttctctcg gctgtgatta ttccgaactc acgtgttacc tcacctcgt ctaccagcac aacctcttct tctgtgtgc cctggggatt atcctgttct gtaactgga gatcctcagg accctgttcc gctcagctc caagcggcgc caccgcagg tcaagctcat cttgccatc gtggtggcct acttctcag ctggggtccc tacaacttca cctgtttct gcagagctg ttccggaccc agateatccg gagctgcgag gccaaacagc agtagaata cgccctgtc atctgcgcga acctcgctt ctccactgc tgcttaacc cgtgtctta tgtctctg ggggtcaagt tccgcacaca cctgaaacat gttctcggc agtctggt ctgcccgtg caggcaacca gccagcctc gatccccac tcccctggg ccttgccta tgaggcgcc tcttctact ga 1 MESSGNPEST TFFYDLSQ PCENQAWVFA TIATTVLYCL VFLLSLVGN LVLWLVLKYE P SLESNTNIFI LNLCLDLVF ACLLPWISP YHWGVUGDF LCKLNMIFS ISLYSIFFL TIMTHRYLS VVPSLTLRV PTLRCRVLT MAVWVASILS SILDTHFKV LSSGCDYSEL TWYLTSVYQH NLFFLLSLGI ILFCYVEILR TIFRSKRRT HRTVKLIFAI VVAYFLSWGP YNFTLFQTL FRTQIIRSC AKQOLEYALL ICRNLAFSHC CFNPVLYVTV GVKFRTHLKH VLRQFWFCRL QAPSPASIPH SPQAFAYEGA SFY gogatggcga tgatgcctct agtccctcat catccagagc ggcaggcgag ctggggctccg A gactgcgaga tggaggagg ggcgcctgcg goaccggcca ggcttatctg tcttgggctt ctttgtcac atattgtca tctgtgact gaggcctga ctacactagt atttttgggg agcagaagaa ggagacattt ctctccgaaa atgaactcaa caggccacct tcaggatgcc cccaatgcc cctcgtctca tgtgcctcac tcacaggaag gaaacagcac ctctctccag gagggtctt aggatctcat ccacacagc accttggtga cctgtacttt tctactggcg gtcatcttct gctgggttc ctatggcaac ttcatgtct tcttgcctt cttegatcca gccttcagga aattcagaac caacttbgat tcatgatcc tgaacctgtc ctctgtgac ctcttcattt gtggagtgc agcccccatg ttacactttg tgttatctt cagctcagcc agtatgctc cggatgctt ctgcttcat ttccatctca ccagttcagg ctctcatc atgtctctga agacagtgc agtatgcgc ctgcaacggc tccggtatgtt gttgggaaa cagcctaate gcacggctc ctttccctgc accgtacttc tcacctgct tctctggcc accagtttca ccttgcac ctggctacc ttgaaaacca gcaagtccca cctctgtctt cccatgtcca gtctgattgc tggaaaaggg aaagccattt tgtctctcta tgtgtcgac ttacacttct gtgtgtgtgt ggtctctgtc tcttaacatca tgattgtctc gacctgcg aagaacgctc agtcagaaa gtgccccct gtaatacag tcatgtctc cagaccacag cctttcatgg ggtccctgt gcaggaggt ggagatccca tccagtgtc catccggct ctgtatagga accagaatta caacaaactg cagcacgttc agaccgttg atatacaag	Homo sapiens
451	130108	G Protein-Coupled Receptor 75 (GPR75)	(NM_006794	atggagtcct caggcaaccc agagagcacc accctttttt actatgacct tcagagccag A ccgtgtgaga accaggcctg ggtctttgct accctggcca ccactgtcct gtactgcctg gtgtttctcc ttagcctagt gggcaacagc ctggtcctgt gggctctggt gaagtatgag agcctggagt cctcaacaa catcttcate ctcaacctgt gcctctcaga cctgggtgtc gctgtgtgt tgctctgtg gatctccca taccactggg gctgggtgct gggagacttc ctctgcaaac tctcaatat gatcttcc atcagctct acageagcat ctcttccctg accatcatga ccatceaccg ctacctgtcg gtatgagcc cctctccac cctggcgctc ccacccctcc gctgcgggt gctggtgacc atggctgtgt gggtagccag catcctgtcc tcacatctcg acaccatctt ccacaagtg cttctctcg gctgtgatta ttccgaactc acgtgttacc tcacctcgt ctaccagcac aacctcttct tctgtgtgc cctggggatt atcctgttct gtaactgga gatcctcagg accctgttcc gctcagctc caagcggcgc caccgcagg tcaagctcat cttgccatc gtggtggcct acttctcag ctggggtccc tacaacttca cctgtttct gcagagctg ttccggaccc agateatccg gagctgcgag gccaaacagc agtagaata cgccctgtc atctgcgcga acctcgctt ctccactgc tgcttaacc cgtgtctta tgtctctg ggggtcaagt tccgcacaca cctgaaacat gttctcggc agtctggt ctgcccgtg caggcaacca gccagcctc gatccccac tcccctggg ccttgccta tgaggcgcc tcttctact ga 1 MESSGNPEST TFFYDLSQ PCENQAWVFA TIATTVLYCL VFLLSLVGN LVLWLVLKYE P SLESNTNIFI LNLCLDLVF ACLLPWISP YHWGVUGDF LCKLNMIFS ISLYSIFFL TIMTHRYLS VVPSLTLRV PTLRCRVLT MAVWVASILS SILDTHFKV LSSGCDYSEL TWYLTSVYQH NLFFLLSLGI ILFCYVEILR TIFRSKRRT HRTVKLIFAI VVAYFLSWGP YNFTLFQTL FRTQIIRSC AKQOLEYALL ICRNLAFSHC CFNPVLYVTV GVKFRTHLKH VLRQFWFCRL QAPSPASIPH SPQAFAYEGA SFY gogatggcga tgatgcctct agtccctcat catccagagc ggcaggcgag ctggggctccg A gactgcgaga tggaggagg ggcgcctgcg goaccggcca ggcttatctg tcttgggctt ctttgtcac atattgtca tctgtgact gaggcctga ctacactagt atttttgggg agcagaagaa ggagacattt ctctccgaaa atgaactcaa caggccacct tcaggatgcc cccaatgcc cctcgtctca tgtgcctcac tcacaggaag gaaacagcac ctctctccag gagggtctt aggatctcat ccacacagc accttggtga cctgtacttt tctactggcg gtcatcttct gctgggttc ctatggcaac ttcatgtct tcttgcctt cttegatcca gccttcagga aattcagaac caacttbgat tcatgatcc tgaacctgtc ctctgtgac ctcttcattt gtggagtgc agcccccatg ttacactttg tgttatctt cagctcagcc agtatgctc cggatgctt ctgcttcat ttccatctca ccagttcagg ctctcatc atgtctctga agacagtgc agtatgcgc ctgcaacggc tccggtatgtt gttgggaaa cagcctaate gcacggctc ctttccctgc accgtacttc tcacctgct tctctggcc accagtttca ccttgcac ctggctacc ttgaaaacca gcaagtccca cctctgtctt cccatgtcca gtctgattgc tggaaaaggg aaagccattt tgtctctcta tgtgtcgac ttacacttct gtgtgtgtgt ggtctctgtc tcttaacatca tgattgtctc gacctgcg aagaacgctc agtcagaaa gtgccccct gtaatacag tcatgtctc cagaccacag cctttcatgg ggtccctgt gcaggaggt ggagatccca tccagtgtc catccggct ctgtatagga accagaatta caacaaactg cagcacgttc agaccgttg atatacaag	Homo sapiens

452	130108 G Protein-Coupled Receptor GPR75	NP_006785.1	<p>agtcaccaacc aactggtcac cctcgcagca agccgactcc agctcgtatc agccatcaac</p> <p>ctctccactg ccaaggattc caaagccgtg gtcactgtg tgatcattgt gctgtcagtc</p> <p>ctggtgtgct gttctccact ggggatttcc ttggtacagg ttggtctctc cagcaatggg</p> <p>agcttcattc ttaccagtt tgaattgttt ggatttactc ttatatcttt caagtcagga</p> <p>ttaaaccttc ttatatctc tcggaacagt gcagggtga gaagaaagt gctctggtgc</p> <p>ctccaataca taggctggg tttttctgc tgcaacaaa agactcgact tcgagccatg</p> <p>ggaaaaggga acctogaagt caacagaaac aaatctctcc atcatgaaac aaactctgcc</p> <p>tacatgttat ctccaagcc acagaagaaa ttgtggacc aggctgtggtg cccaagtcat</p> <p>tcaaaagaaa gtatgtgtgag tccaagatc tctgtgtgac atcaacactg ttgtcagagc</p> <p>agctcgaccc ccataacac tcggattgaa ccttactaca gcattctataa cagcagccct</p> <p>tcccaggagg agagcagccc atgtaactta cagccagtaa actcttttg atttgccaat</p> <p>tcataatgt ccattgatta tcacaccact aatgacttag tgcaggaata tgacagcact</p> <p>tcagccaagc agattccagt cccctccgtt taaagtcagt gaggctatag gatcttatgt</p> <p>aaacagtttt tgtttctgat agtaatggac tttattctaa cttagatca gtggcggatc</p> <p>aaaacctaca agattcaact gaaaagtgg cagttatggt tttcttctat ctgatgtgtc</p> <p>agtatctgtt gatttgcttt gtagtttgtt gacattctaa gatttgatgt gaaagtttta</p> <p>gattttttac cctg</p>	Homo sapiens
453	133117 G Protein-Coupled Receptor RAIG1	NM_003979	<p>FIVLSEFDP AFRKFTNED FMILNLFCD LFICGVTAPM FTFVLFFSSA SSIPDAFCFT</p> <p>FHLTSSGFI MSLKTVAVIA LHRLRMVLGK QPNRTASFCP TVLLILLLWA TSFTLATLAT</p> <p>LKTSKSHLCL PMSLLIAGKG KAILSLYVDV FTFCVAVWSV SYIMIAQTLR KNAQVRKCPP</p> <p>VITVDASRPQ PFMGVVPQGG GDPIQCAMPA LYRNQYNKL QHVQTRGYTK SPNQLVTPAA</p> <p>SRLQLVSAIN LSTAKDSKAV VTCVIIVLSV LVCCPLGHS LVQVVLSSNG SFILYQFELE</p> <p>GFTLIFKSG LNPFIYSRNS AGLRRKVLWC IQYIGLGFIC CKQKTLRLAM GKGNLEVRN</p> <p>KSSHHEITNSA YMLSPKPKK FVDQACGPH SKESMVSPKI SAGHQHCGQS SSTPINTRIE</p> <p>PYYSIYNSSP SQEESSPCNL QPVNSFGFAN SYIAMHYHTT NDLVQEVYST SAKQIPVPSV</p> <p>ataacagcat gaagtgcctg ggaactggaa taggctgtgc ctctccctgc accctccccc A</p> <p>tccctgtccc tctgtccacc cctcgtcctg tccctccctc cggcgagggc cgcctttata</p> <p>acaaactgtc agagtgcgag ggcgggatat ctgtccaaag tctccccccag cactgaggag</p> <p>ctcgcctgct gccctctgc gcgcgggaag cagcaccagg ttacacggcca acgccttggc</p> <p>actagggtcc agaattgcta caacagtcctc tgatggttgc cgcaatggcc tgaatccaa</p> <p>gtactacaga ctttgtgata aggtgaagc ttggggcatc gtcctagaaa cgggtggccac</p> <p>agccgggggt gtgacctcgg tggccttcat gctcactctc ccgatccctg tctgcaaggt</p> <p>gcaggactcc aacaggcga aaatgctgc tactcagttt ctcttctcc ttggtgtgtgt</p> <p>gggcatcttt ggcctcacct tgccttcat catcgagact gacggagaca cagggccccac</p> <p>acgcttcttc ctctttggga tctcttttc catctgttc tccctgctgc tggctcatgc</p> <p>tgctcagctg accaagctcg tccgggggag gaagccctt tccctgttgg tgattctggg</p> <p>tctggccgtg ggcttcagcc tagtccagga tgttatcgct attgaatata ttgtctgac</p> <p>catgaatagg accaagctca atgtcttttc tgagctttcc gctcctcgtc gcaatgaaga</p> <p>ctttgtctc ctgctcacct acgtctctt ctgtatggcg ctgaccttcc tcatgtctc</p> <p>cttcaccttc tgtgttctct tcacgggctg gaagagacat ggggccccaca tctacctcac</p>	Homo sapiens

454	133117 G Protein- Coupled Receptor RAIG1	NP_003970.1	gatgtctctc tccattgcca tctgggtggc ctggatcacc ctgtcctatgc ttcctgactt tgaccgcagg tgggatgaca ccatctctcag ctccgcttgg gctgccaatg gctgggtgtt cctgttggtt tatgttagtc ccgagttttg gctgctcaca aagaacgaa accocatgga ttatcctgtt gaggatgctt tctgtaaac tcaactcgtg aagaagagct atggtgtgga gaacagagcc tactctcaag aggaatacac tcaaggtttt gaagagacag gggacacgct ctatgcccc tattccacag atttcagct gcagaacacg cctcccaaa aggaattctc catccacagg gccacgctt ggccagccc ttacaagac tatgaagtaa agaaagaggg cagctaactc tgtctgaag agtggacaa atgcagccgg gcgcagatc tagcgggagc tcaaaaggat gtggcgaaa tcttgagct tctgagaaa ctgtacaaga cactacggga acagtttgc tccctccag cctcaaccac aattcttcca tgcgtgggct gatgtggct agtaagactc cagttcttag aggcgtgta gtatttttt tttttgtct catcctttg atactttt taagtggag tctcaggcaa ctcaagttta gaccttact cttttgtt gtttttgaa acaggtatctt gctctgtcac ccaggcttga gtgcagtggt gcgatacag cccagtgag cctcgaccac ctgtgtctaa gcaatcctcc catctccatc tcccaaatg ctgggatgac agcgtgagc cacagctccc agcctaggcc cttaactctg ctgttatctt ccatggacta aggtctggt catctgagct cacgtggct cacacagctc tagggcctg ctctctaac tcacagtgg tttgtgagg ctctgtggc cagacgacag ctgcatactc gagcaaaat agcaaaagcc tctctcagcc cactggcctg aatctacact ggaagccaac ttgtggcac cccgctccc caaccttct tgcctgggta ggagaggcta aagatcacc taaatctact catctctcta gtgtgctc acattggcc tcagacgctc cccagacca attcacaggt caccctctc tcttgact gtcccaaac ttgctgtcaa ttcgagatc taatctccc ctacgctctg ccaggaattc ttctagacct cactagcaca agccgggtg ctccttgta ggagaatttg tagatcttc tcacttcaa ttcctggggc tgatacttct ctcatctgc acccaacct ctgtaaatag attacgcga ttacggctg cattctgtaa gtgggcattg tctcctaag gagagtggt cattgtataa taagtattc acctgagtat gcaataaaga tgtgtggcc actcttctcat ggtgtggca gcaaaaaa aaaaa RRMLPTQFL FLLGVLGIFG LTFAFIIGLD GSTGPRRFFL FGLFSICFS CLIAHAVSLT KLVRGRKPLS LLVILGLAV FSLVQDVIAI EYIVLTWRT NNVFSELSA PRNEDFVLL LTYVLFMAL TFLMSSFTFC GSFTGWRHG AHYLTMLLS IAIWAWITL LMLPDFDRW DDTILSSALA ANGWVFLAY VSPEFWLLTK QRNPMDYPVE DAFCKPOLVK KSYGVENRAY SQEITQGE ETGDTLYAPY STHFQIQNP PQKEFSIPRA HAWPSYKDY EVKKEGS atggggacct gtgacattgt gactgaagcc aatatctcat ctggccctga gagcaacacc A acgggcatca cagcttctc catgccagc tggcagctg cactgtggc accagctac ctggccctgg tgcgtgtggc cgtgacgggt aatgcacatg tcatctggat catcctggcc catcgagga tgcgcacagt caccacactac ttcatgtca atctggcgt ggtgacctc tgcatggctg ccttcaatgc cgccttcaac ttgtctatg ccagccaca catctggtac tttgccgctg ccttctgta cttccagaac ctcttccca tcacagccat gttgtcagc atctactcca tgaccgcat tgcgtccgac aggtacatgg ccactgtcca cccctccag ctcgggtt cagctccag caccagggc gttattgctg gcactgtggt ggtggtctc gcctggcct cccctcagt ttctactcc accgtacca tggaccagg tgcaccaag	Homo sapiens
455	152198 Tachykinin Receptor 2	NM_001057		Homo sapiens

Homo
sapiens

456 152198 Tachykinin Receptor 2 NP_001048.1
 HRRMRTVTNY FIVNLALADL CMAAFNAFNF FVYASHNIWY FGRFACYFQNF LEPITAMFVS
 IYSMTAIAAD RYMAIVHPFQ PRLSAPSTKA VIAGIWLVAL ALASPQCFSY TVTMDQGATK
 CVAWPEDSG GKTLILYHLV VIALIYFLPL AMFVAYSVI GLTLWRRRAVP GHOAHGANLR
 HLQAKKFKVK TMLVVLTFEA ICWLPYHLYF ILGSEQEDIIY CHKFIQQVYL ALFWLAMSST
 MYNPIIYCCL NHRFRSGFRL AFRCCPWVTP TKEDKLELTP TTSLSLSTRVR CHTKETLEFMA
 GDTAPSEATS GEAGRPQDGS GLWFGYGLLA PTKTHVEI

Homo
sapiens

457 152201 Thyrotropin Receptor NM_000369
 ccgctccgg gctctctttt ggcctggggg aaccgaggt gcagagctga gaatgaggcg A
 attctggagg atggagaaat agcccgaggt cccgtggaaa atgagggcgg cggacttgct
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 cccagactta ccgcccagta cgcagactct gaagcttatt gagactcacc tgagaactat
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 gagtctcctt cactcacac gggctgacct ttctaccga agccactgct gtgcttttaa
 gaatcagaag aaatcagag gaatccttga gtccttgatg tgaatgaga gcagtatgca
 gagcttgcgc cagagaaaaa ctgtgaatgc cttgaatgc cccctccacc aggaatatga
 agagaatctg ggtgacagca ttgtgggta caaggaaaaa tccaagtcc aggatactca
 taacaacgct cattattacg tcttcttga agaacaagag gatgagatca ttggttttgg
 ccaggagctc aaaaaccccc aggaagagac tctacaagct ttgacagcc attatgacta
 caccatatgt ggggacagtg aagacatggt gtgtaccccc aagtccgatg agttcaacc
 gtgtgaagac ataattgggt acaagttcct gagaattgtg gtgtgggttcg ttagtctgct

458	152201	Thyrotropin Receptor	NP_000360.1	<p> ggctctctg ggcaatgtct ttgtctctgct tattctctc accagccact acaaatgaa cgteccccg tttctcatgt gcaactggc ctttgcggat ttctgcatgg ggaatgtacct gctctcacc gcctctgtag acctctacac tcaactctgag tactacaacc atgccatga ctggcagaca ggccctgggt gcaacacggc tggttctctc actgtctttg caagcgagtt atcggtgat acgtgacgg tcatcaccct ggagcgctgg tatgccatca ccttcgceat gcgctggac cggaagatcc gcctcaggca cgcattgtgc atcatgggtg gggcgctgggt ttgtgcttc cttctcgcc tgcctcttt ggtgggaata agtagctatg ccaagtcag tatctgctg cccatggaca ccgagacccc tcttgcctcg gcatatatgt tttttgtct gacgtcaac atagttgctt tctgtcatgt ctgctgctgt catgtgaaga tctacatcac agtcgaaat ccgcagtaca accagggga caagataacc aaattggcca agagatggc tgtgtgac ttacacgact tcatatgcat gcccacaac tcaattctatg ctctgtcagc aatctgaac aagcctctca tcaactgttag caactccaaa atctgtctg tactcttcta tccacttaac tctgtgcca atccattct ctatgctatt ttcaaccaag ccttcacag ggatgtgtc atctactca gcaagtttgg catctgtaaa cggcaggctc aggcataccg gggcagagg gttctctcaa agaacagcac tgatatcag gttcaaaaagg ttaccacga catgaggcag ggtctccaca acatggaaga tctctatgaa ctgattgaaa actccatct aaccacaag aagcaaggcc aaatctcaga agatatatg caaacgggtt tgtaagttaa cactacacta ctcaaatgg taggggaact tacaataaa tagtttcttg aatatgcatt ccaatcccat </p>	Homo sapiens
459	152245	C-C Chemokine Receptor 2	NM_000648	<p> MRPADLLQLV LLLDLPRDLG GMGSSPPCE CHQEDFRVT CKDIQRIPSL PPSQTCLKLI P ETHLRTPSH AFSNLPNISR IYVSDIVTLQ QLESHSFYNL SKVTHIEIRN TRNLTIDPD ALKELPLKF LGIFNTGLKM FPDLTKVYST DIFFILEITD NPYMTSIPVN AFQGLCNETL TLKLYNNGFT SVQYAFNGT KLDVAVLNKN KYLTVIDKDA FGVYSGPSL LDVQTSVTA LPSKGLEHLK ELIARTWTLL KKLPISLSFL HLTRADLSYP SHCCAFKNQK KIRGILESML CNESMSQSLR QRKSVNAIN PLHQYEENL GDSIVGYKEK SKFQDTHNNA HYYVFFEEQE DEIIGFQEL KNQOETLQA FDSHYDYTIC GDSIEDMVCTP KSDEENPCED IMGYKFLRIV VMFVSLIALL GNVFVLLIL TSHYKLVNPR FLMCNLAFAD FCMGYMLLI ASVDLYTHSE YNNHAIDWQT GPCCNTAGFF TVFASLSVY TLTVTTLERW YAITFAMRLD RKIRLRHACA IMVGVVCCF LLALLPLVGI SSVAKVSICL PMDTETPLAL AYIVFVTLN IVAFVIVCCC HVKIYITVRN PQYNPGDKDT KIARKMAVLI FTDFICMAPI SFYALSALIN KPLITVSNK ILLVLFYPLN SCANPFIYAI FTKAFQDVF ILLSKFGICK RQAQYRGQR VPPKNSTDIQ VQKVTHDMRQ GLHNMEDVYE LIENSHLTPK KQGQISEEYM QTVL caggactgcc tgagacaagc cacaagctga acagagaaag tggattgaac aaggacgcat A ttccccagta catccacaac atgctgtcca catctcgttc tcggtttatc agaataacca acgagagcgg tgaagaagtc accaccttt ttgattatga ttacgtgtct cctgttcata aatgtgact gaagcaaat ggggcccaac tctgcctcc gctctactcg ctggtgttca tctttggtt ttgtggcaac atgctgttcg tctcatctt aataactgc aaaaagtga agtgttgac tgacatttac ctgtcaacc tggccatctc tgatctgctt ttcttatta ctctccatt gtgggtcac tctgtgcaa atgagtggtt ctttgggaat gcaatgtgca aattattcac agggctgtat cacatcggtt atttggcgg aatctcttc atcctctcc tgacaatcga tagataacctg gctattgtcc atgctgtggt tgccttaaaa gccaggacgg </p>	Homo sapiens

460	152245 C-C	NP_000639.1	Chemokine Receptor 2	<p> tccaccttgg ggtgtgaca agtgtgata cctggttggg ggtgtgtgtt gcttctgtcc caggaatcat ctttactaaa tgccagaaa agattctgt ttatgtctgt ggccttatt ttccacagg atggaataat ttccacaaa taatgaggaa cattttggg cgtgtcctgc cggtgctcat catgtctatc tgctactcg gaactcctaa aacctgctt cgtgtcgaa acgagaagaa gaggcatagg gcagtagag tcattctcac catcatgatt gttactttc tctctggac tccctataac attgtcattc tctgaacac ctccaggaa ttctcggcc tgagtaactg tgaagcacc agtcaactg accaagccac gcagtgaca gagactctg ggatgactca ctgtgcatc aatccatca tctatgcctt cgttggggag aagttcagaa ggtatcttc ggtgtcttc cgaagcaca tcaccaagcg cttctgcaa caatgtccag tttttacag ggagacagt gatggagtga ctcaacaaa cagccttcc actggggagc aggaagtctc ggtgtgttta taaacgagg agcagtttga ttgtgttta taaagggaga taacaatctg tatatacaa caaactcaa ggtttgttg aacaatagaa acctgtaag caggtgccc ggaacctcag ggctgtgtg actaatcac actatgtcac ccaatgcata tccaaatgt gctcaggga taatccagaa aaactgtggg tagagacttt gactctccag aaagctcatc tcagctctc aaaaatgcct cattaccttg tgctaactct cttttcttag tctcataat ttctcactc aatctctgat tctgtcaatg tcttgaatc aaggccacg tggaggtgaa gaagagaatg tgacaggcac agatgaatgg gagtgggga tagtggggtc agggctgaga ggagaaggag ggagacatga gcctgctga gcctggacaa agacaaagt gagcaaggg ctcacgcat cagccaggag atgatactgg tcttagccc catctgccac gtgtatttaa ccttgaaggg ttcaccaggt caggagagat ttgggaactg caataacctg ggagttttg tggagtcgga tgattctct ttgcataagt gcatgacata ttttgcctt attacagtt atctatggca cccatgcacc cccctgcta aatcatgaa atatcatgct ccattgtca gatgtctct aggcacatc cccctgcta aatcatgaa aattttgt ttataaaga tgcattatct atgatgtct aatatgta tatgcaatat aaaatttag MLSTSRRFI RNTNESGEEV TTFDDYDGA FCHKFDVKQI GAQLPLPLYS LVFIFGVGN P MDVLILNC KKLCLTDIY LNLAISDLL FLITPLWAH SAANEWVFGN AMCKLFTGLY HIGYFGGIF IILLITIDRYL AIVHAVFALK ARTVTFGWT SVITWLIVAF ASVPGIIFTK CQKEDSVVC GPYFPRGWN FHTIMRNILG LVPLLLIMVI CYSGILKTL RCRNEKRRH AVRVITIMI VYFLWTPYN IVILLNTFQE FFLSNCEST SOLDQATQVT ETLGNTHCCI NPIIYAFVE KFRRYLSVEF RKHITKRFCK QCPVEYRETV DGVTSNTPS TGEQEVSAGL CAGAAATCCT CAGGTCCCAC AGAAATGAAC ACGTTCCTA AAATAAAGTC AAGCCAAGCT A GTCCTACCCC AAAGAAATC CTAGCAAGCA AAGTGGCTT CTTCTCTGAG CCCCAGCCA GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGAG TGACTTAACA GTTAGAGGGC ACTTGATGAG TAAGGTGAAA TAGGAAACC AAGTCAGAGC ACACCTCCCT TCTGAGTCCC AACCATGTCT ACATCTGGAG AAGAAGATT AAGTCAAGG ATCAGAGCT TGTGATTAGA GACTGCCAGG GTCCATATGA CCAAGCGGG GTCCCAGGT TGAAGCTGG GTTAGAGTATC CATTATCTGA ATTTCCACT CTATGGATGA TCACCTTTAT TCTTTCTCTT TCTTTGAATT TATTTCCATT TGTATTATCC TAAATTCCT GGTAGATCAC CTGTGAAAG TTGCAACTGT CTGATAAGAA TAAAGGGGA AGGATTGAC TTTACAGCAG AGACTTCAGA AGGATCCTC TCTAGGAGCA AATTGGGGC AATCCAGTGG GAAGGAGGTG GAAGACTGCA CTTGAGCTGC GTTTGGACAA CAGGCAACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT </p>	Homo sapiens
461	152299 Interleukin-8 Receptor A	LG5459		<p> tccaccttgg ggtgtgaca agtgtgata cctggttggg ggtgtgtgtt gcttctgtcc caggaatcat ctttactaaa tgccagaaa agattctgt ttatgtctgt ggccttatt ttccacagg atggaataat ttccacaaa taatgaggaa cattttggg cgtgtcctgc cggtgctcat catgtctatc tgctactcg gaactcctaa aacctgctt cgtgtcgaa acgagaagaa gaggcatagg gcagtagag tcattctcac catcatgatt gttactttc tctctggac tccctataac attgtcattc tctgaacac ctccaggaa ttctcggcc tgagtaactg tgaagcacc agtcaactg accaagccac gcagtgaca gagactctg ggatgactca ctgtgcatc aatccatca tctatgcctt cgttggggag aagttcagaa ggtatcttc ggtgtcttc cgaagcaca tcaccaagcg cttctgcaa caatgtccag tttttacag ggagacagt gatggagtga ctcaacaaa cagccttcc actggggagc aggaagtctc ggtgtgttta taaacgagg agcagtttga ttgtgttta taaagggaga taacaatctg tatatacaa caaactcaa ggtttgttg aacaatagaa acctgtaag caggtgccc ggaacctcag ggctgtgtg actaatcac actatgtcac ccaatgcata tccaaatgt gctcaggga taatccagaa aaactgtggg tagagacttt gactctccag aaagctcatc tcagctctc aaaaatgcct cattaccttg tgctaactct cttttcttag tctcataat ttctcactc aatctctgat tctgtcaatg tcttgaatc aaggccacg tggaggtgaa gaagagaatg tgacaggcac agatgaatgg gagtgggga tagtggggtc agggctgaga ggagaaggag ggagacatga gcctgctga gcctggacaa agacaaagt gagcaaggg ctcacgcat cagccaggag atgatactgg tcttagccc catctgccac gtgtatttaa ccttgaaggg ttcaccaggt caggagagat ttgggaactg caataacctg ggagttttg tggagtcgga tgattctct ttgcataagt gcatgacata ttttgcctt attacagtt atctatggca cccatgcacc cccctgcta aatcatgaa atatcatgct ccattgtca gatgtctct aggcacatc cccctgcta aatcatgaa aattttgt ttataaaga tgcattatct atgatgtct aatatgta tatgcaatat aaaatttag MLSTSRRFI RNTNESGEEV TTFDDYDGA FCHKFDVKQI GAQLPLPLYS LVFIFGVGN P MDVLILNC KKLCLTDIY LNLAISDLL FLITPLWAH SAANEWVFGN AMCKLFTGLY HIGYFGGIF IILLITIDRYL AIVHAVFALK ARTVTFGWT SVITWLIVAF ASVPGIIFTK CQKEDSVVC GPYFPRGWN FHTIMRNILG LVPLLLIMVI CYSGILKTL RCRNEKRRH AVRVITIMI VYFLWTPYN IVILLNTFQE FFLSNCEST SOLDQATQVT ETLGNTHCCI NPIIYAFVE KFRRYLSVEF RKHITKRFCK QCPVEYRETV DGVTSNTPS TGEQEVSAGL CAGAAATCCT CAGGTCCCAC AGAAATGAAC ACGTTCCTA AAATAAAGTC AAGCCAAGCT A GTCCTACCCC AAAGAAATC CTAGCAAGCA AAGTGGCTT CTTCTCTGAG CCCCAGCCA GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGAG TGACTTAACA GTTAGAGGGC ACTTGATGAG TAAGGTGAAA TAGGAAACC AAGTCAGAGC ACACCTCCCT TCTGAGTCCC AACCATGTCT ACATCTGGAG AAGAAGATT AAGTCAAGG ATCAGAGCT TGTGATTAGA GACTGCCAGG GTCCATATGA CCAAGCGGG GTCCCAGGT TGAAGCTGG GTTAGAGTATC CATTATCTGA ATTTCCACT CTATGGATGA TCACCTTTAT TCTTTCTCTT TCTTTGAATT TATTTCCATT TGTATTATCC TAAATTCCT GGTAGATCAC CTGTGAAAG TTGCAACTGT CTGATAAGAA TAAAGGGGA AGGATTGAC TTTACAGCAG AGACTTCAGA AGGATCCTC TCTAGGAGCA AATTGGGGC AATCCAGTGG GAAGGAGGTG GAAGACTGCA CTTGAGCTGC GTTTGGACAA CAGGCAACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT </p>	Homo sapiens

152299 Interleukin-8 Receptor A
NM_000634

462

152299 Interleukin-8 Receptor A
NM_000634

462

Homo sapiens

agctgttaag tcaactgtat cctctgactgc agctoctact gttggacaca cctggccgggt A
gcttcaagta gatcaaacca ttgtgaaac tgaagaggac atgtcaataa ttacagatcc
acagatgtgg gattttgatg atctaattt cactggcatg ccactggcag atgaagatta
cagccctgt atgtagaaa ctgagacact caaagatg gtttgatca tgcctatgc
cctagtgtc ctgtgagcc tgtgggaaa cctctgggt atgtggta cttatatacag
cagggtcggc cgctccgtca ctgagtcta cctgtgaac ctggccttgg ccgacctact
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catctcaggt gtgttgagt gtctgtgga gacatgag aacatgtt cccctgggg gtggtggatg
acctgccagc tggcctgtg agtagctgga aacatgtt cccctgggg gtggtggatg
aacaagaga aagaggttt ggaagccaga tctatgccac aagaaccccc ttaccccc
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gcagccctta gccctccc tctgcagctt ccaggctggc gtgcagcatc agcatccct
gaaagccatg tgcagccacc agtccattgg gcaggcagat gtcttaata aagcttctgt
tccgtgttg tccctgtgga agtatcttg ttgtgacaga gtcaagggtg tgtgcagcat
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463	152299	Interleukin-8 Receptor A	NP_000625.1	MSLNTDPOWV DFDDLNTFGM PADEDYSPC MLETFELNKY VTIAYALVF LLSILGNSIV P MLVILYSRVG RSVTDVYLIN LALADLLFAL TLPWAASKV NGWIFGTFLC KVVSLLKENV FYSGILLIAC ISVDRYLAIV HATRTLQKR HLKVFCLGC WGLSNVLSLP FTFRQAYHP NNSSPVCYEV LGNDTAKWRM VLRILPHTEG FIVPLEVMLF CYGFTLRTL F KAHHGQKHRA MRVIFAVVLI FLLCWLPLYNL VLIADTLMRT QVIOESCERR NNIGRALDAT EILGFLHSCL NPITIAFIGQ NFRHGFLKIL AMHGLVSKFEF LARHRTSYT SSSVNVSSNL	Homo sapiens
464	158822	Mas Proto-Oncogene	NM_002377	cctgaggcct cctcatgat gggtaaacag tgatcatatt tgttgttgag gaacccacga A acatctcaac tggcaggagc gactcagctg ggaatgcaca tcggcaaat cccatctgctc actgggtcat tatgagcatc tcccacgtgg ggtttgttga gaatgggatt ctcctctggt tcctgtgctt ccgagatgaga agaaatccct tcactgtcta catcacccac ctgtctatcg cagacatctc actgctcttc tgtattttca tctgttctat cgactatgct ttagattatg agctttcttc tggccattac tacacaattg tccattatc agtgactttt ctggttggctt aaacacaggg cctctatctg ctgacggcca ttagtgtga gagggtgcct tcagtctctt accctatctg gtaccgatgc catcgcccca agtaccagtc ggcattggctc tfgcccttc tgtggctct tcttgcttg gtgaccacca tggagtatgt catgtgcatc gacagagaag aagagagtea cctcgggaat gactccgag cagtcactat ctttatagcc atctgagct tcctgtgctt cagccctc atgctggtgt ccagaccat cttggtcgtg aagatccga agaacacgtg ggttcccat tctccaagc ttacatagt catcatggct accatcata tattctcat ctctgctat cccatgagac tctttactg gctgtactat gattattggt cgaccttgg gaacctacac cacatttccc tgctctctc cacaatcaac agtagcgcca acctttcat ttactcttt tggggaagca tgaagaaga gagattcaag ggtccttaa aagttgttct gaccaggct ttcaaatgat aaatgaacc tcggcgccag aagacaaatt gtaatacggg cacagttgag actgtcgtct aagaactgt agggagttg tggataaaa tgggtgaaca caggtcattt ttagtgtgtg ctggaaat gacttaagta tctctaaat gtgatacaga agaactctc atcccatatg catgagatac taattaatga tgaaa MRNPFTVYI THLSIADISL LFCIFILSID YALDYELSSG HYTTVTLVS TFLEGYNTGL YLLTAISVER CLSVLYPIWY RCHRPKYQSA LVCALLWALS CLVTTMEYVM CIDREEESH RNDCAVILF IAILSLFLVFT PLMLVSSITL VKIRKNTWA SHSKLYIVI MVTIIFLIF AMPRLLYLL YYEYXWSTFN LHHISLLEST INSSANPFIY FVGSKKKR FKESLKVLVT RAFKDEMQR RQKNCNVTY VETVV	Homo sapiens
465	158822	Mas Proto-Oncogene	NP_002368.1	MDGSNVTSFV VEEPTNISTG RNASVGNHR QIPVHWIM SISPGFVEN GILLWFLCFR P MRNPFTVYI THLSIADISL LFCIFILSID YALDYELSSG HYTTVTLVS TFLEGYNTGL YLLTAISVER CLSVLYPIWY RCHRPKYQSA LVCALLWALS CLVTTMEYVM CIDREEESH RNDCAVILF IAILSLFLVFT PLMLVSSITL VKIRKNTWA SHSKLYIVI MVTIIFLIF AMPRLLYLL YYEYXWSTFN LHHISLLEST INSSANPFIY FVGSKKKR FKESLKVLVT RAFKDEMQR RQKNCNVTY VETVV	Homo sapiens
466	159152	G Protein-Coupled Receptor GPR43	NM_005306	atgtcgcggg actggaagag cctcttgatc ctcatggctt acatcatcat cttctcact A ggctctccctg ccaactctc ggccttgctg ggcgtatccg ccagcccccag cctgcacctg tgcactctc cctgctgagc ctgacgtgg ccgactctct cctgctgctg ctgctgcccc tcaagatcat cgaggctgcg tcgaactcc gctgtacact gcccgaagtc gtctgcccc tcacgagttt tggctcttac agcagcatct actgcagcac gtggtctctg gcgggcatca gcatcgagcg ctacctggga gtggtcttc ccgtgagca caagctctc gcggcgctc tgatggaggt gattgcagct ctgggtggct gggttatgct ctttgggtac tgaccatcg tgatcatcgt tcaatactgt aacacactg agcaggtcag aagtggaact	Homo sapiens

[illegible]

469	159973	Vasoactive Intestinal Polypeptide Receptor 1	NP_004615.2	<p>cctgcccggg cgcggccagc cccggccctg ggctcggagg ctgcccccg ggccttggtc</p> <p>tctggtccgg acactcctag agaagcagc cctagagcct gccgggagcg tttctagcaa</p> <p>gtgagagaga tgggagctcc tctcctggag gattgaggt ggaactcagt cattagactc</p> <p>ctctccaaa ggcctccctac gccaatcaag gcaaaaagt ctacatactt tcatectgac</p> <p>tctgccccct gctggtctct ctgccaatt ggagaaaag aacggtgga tctcaaaaca</p> <p>acactggtg gactgaggg cagaaaggtt ctgccgggg aaggtcacca gcaccaacac</p> <p>cacggtagt cctgaaattt caccattgct gtaagttcc ttgggttaa gattaccac</p> <p>tcaggcattt gactgaagat gcagctcact accctattct ctctttacgc ttagttatca</p> <p>gctttttaa gtgggttatt ctggagtitt tgttggaga gcacacctat cttagtgtt</p> <p>ccccacgaa gtggactggc ccttgggtca gtcggtggg aggcggtgc aaccaagga</p> <p>ctgagggact ctgaagctc tgggaaatga gaagcagcc accagcgaat gctaggtctc</p> <p>ggactaagcc tacctgctc ccaagtctca gtggtctca ctgtcaagt ggtctgtca</p> <p>caccagccat acttatctct ctgtgtgtg gaagcaacag gaatcaagag ctgctctcct</p> <p>tgccaacca cctatgtgc aactgttga actaggtca gagatgtgca cccatgggt</p> <p>ctgacagaaa gcagatacct caccctgcta cacatacagg atttgaactc agatctgtct</p> <p>gataggatg tgaagcagc gactcttact gctaaacttt gtgtatcgt accagccaga</p> <p>tcctcttggt tatttgttta ccacttgtat tattaatgcc attatctcga atccccctg</p> <p>ccacccacc ctccctggcg tgtggtgag gaggtctcca tctcatgtat catctggata</p> <p>ggagcctgct ggtcacagcc tctctgtct gcccttacc ccagtgcca ctacgtctcc</p> <p>taccacacc tctgcagaa gatccctca ggaactgcaac aggtctgtgc acaataaat</p> <p>gtggcttg a</p>	Homo sapiens
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	NM_003382	<p>MRPPSPAPR WLCVLGALA WALGPAGQA ARLEEDYV QMIEVQHKQC LEEALENET P</p> <p>IGCSKMDNL TCWPAFRGQ VVVLACPLIF KLFSSIQGRN VSRSTDEGW THLEPGYPI</p> <p>ACGLDDKAAS LDEQQTMYG SVKTYTIGY GLSLATLLVA TAILSIFRKL HCTRNYIHMH</p> <p>LFISFILRAA AVFIKDLALF DSGESDQCSE GSVGCKAAMV FFQYCVMANF FWLLVEGLYL</p> <p>YTLAVSFFS ERKYFWGYIL IGWGVSTFT MWTIARIHF EDYGCWDTIN SSLWMIKGP</p> <p>ILTSILVNF IFCIIRILL QKLRPPDIRK SDSPYSRLA RSTLLIPLF GVHYIMFAFF</p> <p>PDNFKPEVKM VFELVGSFQ GFVAILYCF INGEVQAEIR RKRRWHLQG VLGWNPKYRH</p> <p>PSGSGNGATC STQVSMLTRV SPGARSSSF QAEVSLV</p> <p>cgggacagag gggcgccccc cgcctcggg gcgctcggct acagctgagg ggcgcgaggt A</p> <p>ctccgcgcac tcgctcccg cccatctgg aggcggcga acccgggga cctagacgg</p> <p>aggcgcggg cgctggcgcg ccccgccac gctgagctcg ggtcgggac gctgctgct</p> <p>cccgctgc tgacctgctg gctgctgcc cccgtgaaca gattcaccc agaagccga</p> <p>tttcatctgg aaatacagga ggaagaaaca aaatgtacag agcttctgag gtctcaaca</p> <p>gaaaaacaca aagcctgcag tggcgtctgg gacaacatca cgtgtggcg gctgccaat</p> <p>gtgggagaga ccgtcacggt gccctgccc aaagtctca gcaatttta cagcaagca</p> <p>ggaacataaa gcaaaaactg tacagtgcag gtaggtcag agacttccc agattcgtc</p> <p>gatgctgtg gctacagcga cccggaggat gagagcaaga tcacgtttta tattctggtg</p> <p>aaggccattt atacctggg ctacagtgc tctctgatg ctcttgcaac aggaagcata</p> <p>attctgtgcc tcttcaggaa gctgactgc accaggaatt acatccacct gaacctgtc</p> <p>ctgtccttca tctgagagc catctcagtg ctggtcaagg acgaqgttct ctactccagc</p>	Homo sapiens

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471 160040 Vasoactive NP_003373.1 MRLLPPALL TCWLAPVNS IHPECRFHE IQEETKCTE LLRSQTEKHK ACSGVWDNIT P
 Intestinal CWRPANVGET VTVPCKVFS NFYSKAGNIS KNCTSDGWE TFPDFVDACG YSDEDESKI
 Polypeptide TFYILVKAIY TLGYSVSLMS LATGSILCL FRKLHCTRNY IHLNLFSLFI LRAISVLVKD
 Receptor 2 DVLYSSTGL HCPDQPSWV GCKSLVFLQ YCINMANFFWL LVEGLYLHTL LVANLPPRRR
 FLAYLLIGW LPTVCGAWT AARLYLEDTG CWDINDHSVP WWVIRIPILI SIIVNFVLF
 SIIRILLQKL TSPDVGNDDQ SQYKRLAKST LLLIPLFGVH YMVFAVFPIS ISSKYQILFE
 ICLGSFQGLV VAVLYCFLNS EVQCELKRW RSRCTPSAS RDRVCGSSF SHNGSEGALQ
 FHRASRAQSF LQETSVI

472 160055 Motilin NM_001507 atgggcagcc cctggaacgg cagcagcggc cccgaggggg cgcggggagcc gccgtggccc A
 Receptor (GPR38) gcgctgccc cttggagcga gcgcgcctgc tcgccccttc cctggggggc gctggtgccc
 gtgaccgctg tgtgctgtg cctgttcgtc gtgagggtga gcggcaacgt ggtgaccgtg
 atgtgatcg ggcgtaccg ggacatgcgg accaccacca actgtacct ggcagcagt
 gccgtgtccg acctactcat cctgctcggg ctgcgcttcg accctgaccg cctctggcgc
 tcgcggccct ggggtgttcg gcgctgctc tgccgctgt cctctacgt ggcgagggc
 tgacctacg ccacgtgct gcacatgacc gcgtcagcg tcgagcgcta cctggccatc
 tgccgcccgc tccggcccgc gctcttggtc accggggccc ggtcccgcgc gctcatcgct
 gtgctgtgg cctggcgct gctctctgc ggtcccttc ttctctggt ggcgtcgag
 caggaccgg gcatctccgt agtcccgggc ctcaatgga cgcgcggat cgcctctcg
 cctctgcct cgtgcgcgc tccttggtc tcgcgggggc caccgccgc cccgccgtc
 gggcccgaga ccgcggaggc cgcggcgctg ttcagccgcg aatgccggc gagccccg
 cagctggggc cgtgcgtgt catgctgtg gtaccaccg cctactctt cctgccctt
 ctgtgcctca gcactctca cgggtcctc gggcgggagc tgtggagcag ccggcgccg
 ctgcaggcc cggccgcctc gggcggggag agagccacc ggcagaccg ccgctcctg
 ctggtgtgg ttctggcatt tataattgc tgggtgccct tccagcttga cagaatcatt
 tacataaaca cggaagattc gcggatgatg tacttctctc agtactttaa catcgctgct

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473	160055 Motilin Receptor (GPR38)	NP_001498.1	ctgcaacttt tctatctgag cgcattctatc aaccaatcc tctacaacct catttcaag aagtacagag cggcgccctt taaactgctg ctgcgaagga agtcaggcc gagaggcttc cacagaagca gggacactgc ggggaagatt gcagggaca ctggaggaga caggtgggc tacaccaga caagcgctaa cgtgaagacg atggataa MLIGRYDMR TTNLYGSM AVSDLLILG LPFDLYRLWR SRPWFGPLL CRSLYVGE CTYATLLHMT ALSVERVIAI CRPLRARVLV TRRRVRLIA VLWAVALLSA GPFLFLVGE QDPGISVVG LNTARIASS PLASSPPLWL SRAPPSPPS GPETAEEAAL FSRECRPSA QLGALRVMLV VTTAYFFLPF LCLSLYGLI GRELWSSRRP LRGAASGRE RGRQTVRVL LWVLAFLIC WLPFHVGRII YINTEDSRMM YFSQYFNIVA LQLFYLASI NPILYNLISK KYRAAFKLL LARKSRPRGF HRSRTAGEV AGDTGDTVG YTETSANVKT MG atggacctgc ccccgagct ctctctgcg ctctatgtg cgcctttgc gctgggttc A ccgtcaacg tcttgccat ccgagcgcg agggccacg cccgctccg tctacccct agctggtct agccctgaa cctggctgc tccgacctgc tgcagacgt ctctgccc ctgaaggcg tggaggcgt agctccgg gctggcctc tgccgcttc gctgtgccc gtctcgcg tggccactt ctccactc tatgcggg ggggttctt ggcggccctg agtcaaggc gctacctgg agcagcttc ccttgggt accaagcct cggagggcg tgctattct ggggggtg cgggccatc tgggcccctg tctgtgtca cctgggtctg gtctttgggt tggaggctc aggaggtg ctggaccaca gcaacacct cctgggcac aacacacgg tcaacggct tccgtctgc ctggagcct ggagccggc ctctgccc cggccctg tcagctctc tctctgct tttttctg ccttgccat cacagcttc tgctacgtg gctgctccg ggcactggc cgtccggc tgacacag cgggaagctg cgggcgct ggtggccg cggggccct ctcagctgc tgcctgct aggacctac aacgctcca acgtggccg ctctctgt ccaatctag gagctcct gcggaagctg gggtcatca cgggtgctg ggtgtggt cttaatccg tggtagccg ttacttggg agggtcctg gcctgaagc agtgtgtg ccaagaacg aagggggcaa gtcccagaag taa	Homo sapiens
474	160059 G Protein- coupled Receptor GPR40	NM_005303	atggacctgc ccccgagct ctctctgcg ctctatgtg cgcctttgc gctgggttc A ccgtcaacg tcttgccat ccgagcgcg agggccacg cccgctccg tctacccct agctggtct agccctgaa cctggctgc tccgacctgc tgcagacgt ctctgccc ctgaaggcg tggaggcgt agctccgg gctggcctc tgccgcttc gctgtgccc gtctcgcg tggccactt ctccactc tatgcggg ggggttctt ggcggccctg agtcaaggc gctacctgg agcagcttc ccttgggt accaagcct cggagggcg tgctattct ggggggtg cgggccatc tgggcccctg tctgtgtca cctgggtctg gtctttgggt tggaggctc aggaggtg ctggaccaca gcaacacct cctgggcac aacacacgg tcaacggct tccgtctgc ctggagcct ggagccggc ctctgccc cggccctg tcagctctc tctctgct tttttctg ccttgccat cacagcttc tgctacgtg gctgctccg ggcactggc cgtccggc tgacacag cgggaagctg cgggcgct ggtggccg cggggccct ctcagctgc tgcctgct aggacctac aacgctcca acgtggccg ctctctgt ccaatctag gagctcct gcggaagctg gggtcatca cgggtgctg ggtgtggt cttaatccg tggtagccg ttacttggg agggtcctg gcctgaagc agtgtgtg ccaagaacg aagggggcaa gtcccagaag taa	Homo sapiens
475	160059 G Protein- coupled Receptor GPR40	NP_005294.1	MDLPPQLSFG LYVAEFALGF PLNVLAIRGA TAHARLRLTP SLVYALNLGC SDLLTVSLP P LKAVEALASG AWPLPASLCP VFVAHFHFL YAGGFALAAL SAGRVLGAFF PLGYQAFRRP CYSWGVCAAI WALVLCILGL VFGLEAPGGW LDHSNTSLGI NTPVNGSPVC LEAWDPASAG PARFSLILL FFLPLAITAF CYVGLRALA RSLTHRRKL RAAWAGGAL LTLLLCVGPY NASNVASFLY PNLGGSWRKL GLITGAWSV LNPLVTGYLG RGPGLTVCA ARTQGGKSQK atgcacacg tggctacgtc cggaccacac cgtctctgg gggcaccgc caagcctcc A ggctgcccg gctgtggcg caagcctcg gacggcccg tcccttcgc ggggcccgtg gacgctggc tctgcccgt ctctctcg cgctgatgc tgcctggcc ggtggggaac tcgctgtca tctacgtcat ctgcgccac aagcctatgc ggacgtgac caattctac atcgccaac tggcgccac ggaagtacc tctctctgt gctgcttcc cttaacggcc ctgctgtacc cgtgcccgg ctgggtgctg ggcacttca tgtgcaagt cgtcaactac atccagcag tctcggtgca ggccactgt gccacttga ccgcatgag tgtggaccgc tggtagtga cgggttccc gttgcccgc ctgaacgcg caagccccc cctggcgctg gctgtcagc tcagcatctg gtaggctct cggcggtgt ctgcgccgt gctgcccctg	Homo sapiens
476	160189 G Protein- coupled Receptor GPR54	NM_032551	atgcacacg tggctacgtc cggaccacac cgtctctgg gggcaccgc caagcctcc A ggctgcccg gctgtggcg caagcctcg gacggcccg tcccttcgc ggggcccgtg gacgctggc tctgcccgt ctctctcg cgctgatgc tgcctggcc ggtggggaac tcgctgtca tctacgtcat ctgcgccac aagcctatgc ggacgtgac caattctac atcgccaac tggcgccac ggaagtacc tctctctgt gctgcttcc cttaacggcc ctgctgtacc cgtgcccgg ctgggtgctg ggcacttca tgtgcaagt cgtcaactac atccagcag tctcggtgca ggccactgt gccacttga ccgcatgag tgtggaccgc tggtagtga cgggttccc gttgcccgc ctgaacgcg caagccccc cctggcgctg gctgtcagc tcagcatctg gtaggctct cggcggtgt ctgcgccgt gctgcccctg	Homo sapiens

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477 160189 G Protein- Coupled NP_115940.1
 Receptor GPR54
 SIVIVYICRH KPMRTVINFY IANLAATDVT FLCCVPFPTA LLYPLPGWVL GDFMCKFVNY
 IQQVSVQATC ATLTAHSVDR WYTVFPLRA LHRTPRLAL AVSLSIWVGS AAVSAPVLAL
 HRLSPGPRAY CSEAFSPRAL ERAFALYNLL ALYLLPLLAT CACYAAMLRH LGRVAVRPAP
 ADSALQGOVL AERAGAVRAK VSRLVAWVL LFAACWGPQ LFLVLQALGP AGSWHPRSVA
 AYALKTWAHC MSYSNSALNP LLYAFLGSHF RQAFRRVCP APRRRPRRR PGPSPFAAPH
 AELHRLGSHP APARAQKPGS SGLAARGLCV LGEDNAPL

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478 160202 Adrenomedull 1G6564
 in Receptor
 (ADMR)
 CCGGGCCAC GTGCCCTGCTG CTGGCGGCT ACGTGACGGC GCATTGTCAT GCACGTGGCTG A
 ACCTATCATG AGACCTGCTCT GCTGCTCACA CTGTATGGAA CCCACATCTG CCTACACTGC
 CACCTGGTAC CAACGTCTCT ACTTCTCTTA TGATGTCATC TGACTGCTGC TACATGCTAG
 ACTGCGCTAT TCACCGGATC CTTGACAACT TTATCAGCCA GACTGCCGGG GGGGCTGCG
 ATGCTGTGGT COATTACTTG CTAAGGACCA GACCGGGGG GCACATGCGC CTCCTCTTCC
 TTCTGTGACA CCCAGCGTTA CATAATCAT ACCACGGGTG ATAGCCAGAC TGCTGGGAGC
 AACCCGCCAC CCTGCAGCCA AGCCTGAGCT TTCAGGCACA CCATTGCTC GCAAAGACTT
 GCGCCATGTG TCCCACTCAG TGTCTTACAC CCAGCTGAGG T

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479 160202 Adrenomedull NM_007264
 in Receptor
 (ADMR)
 cagcctctc acagctcccc atagcctgga cctgcccggc ctccctccag gaccgagggg A
 ctcccaaggg aaactcaggc gtgtgtgtgt cccaatgtca gtgaaccca gctggggggc
 tggccctctg gaggggtga ccgagtgcc taccagtgac ctggagaga tcccaactg
 gaccgagctg cttagacctc tcaaccacac ttgtctgag tgccacgtg agtcagcca
 gagcacaag cgcgtgtcc tctttgacct ctacctggcc atgttgtggt ttgggtgtgt
 ggagaacctc ctggtgatg cgttcaactg gcggtgctca ggcggggcag ggctgatgaa
 cctctacac ctcaacatgg ccatgcgga cctggcatt gtcctgtctc tgccgtgtg
 gatgtggag gtacagctgg actacactg gctctggggc agcttctct gcegttcac
 tcaactctc tactttgtca acatgtatag cagcatctc ttctgtgtg gcctcagtg
 cgaccgctat gtcacctca ccagcgcctc cccctctg cagcgttacc agcacagtg
 gcggggggcc atgtgtgag gcatctgggt cctctcgcc atcatccgc tgccgtgaggt
 ggtccacac cagctgtgtg agggccctga gcccatgtgc ctcttcattg caccttttga
 aacgtacagc acctggccc tggcgtggc cctgtccacc accatcttgg gcttctgtc
 gcccttccct ctcaacacag tcttcaatgt gctgacagc tgccggtgc ggcagccag
 acaacccaag agccggcgcc actgctgtc gctgtggcc tacgtggccg tctttgcat
 ...

480	160202 Adrenomedull NP_009195.1 MSVKPSWGP PSEGTAVPT SDLGEIHNWT ELLDLFNHTL SECHVELSQS TKRVVLFALY P LAMFVVGLVE LLIVICVNRW GSGRAGIMNL YILNMAIDL GIVLSLPVMV LEVILDYTWL WGSFSCRTH YFYFVNMYSS IFFLVCLSDV RYVLTLSASP SWQRQHRVR RAMCAGIWL SAIIPLEW HIQLVEGPEP MCLFMAPPET YSTWALAVAL STTILGFLLP FPLITVFNVL TACRLRQPG PKSRRHCLLL CAYVAVFVMC WLPYHVITLL LTLHGTHISL HCHVHLIYF FYDVIDCFSM LHCVINPLY NFLSPHFRGR LLNAVHYLP KDQTKAGTCA SSSSCSTQHS IIITKGSQP AAAAPHPEPS LSFOAHLLP NTSPISPTQP LTPS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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482	160204	G Protein- Coupled Receptor RTA	CAC39840.1	<p> cagccctcct tgactgtgtc ccagccagca ccaggccagg agctcctacc ctgccattca gggtgttcc agagattcga tcctcttaag gcattatcag tgagcaaatg tgaaggaaat ggtgtctgga agaaagtctt ggttcacatg cctgttagct aagtctttct gaaacaacc tccttcccc ccgtogagtc atttgtgac ttgtatggg ggatttctgg ttatgtcaag gctctggaga caggaagggc ctttgccgc cttgggtagt tgacctgctt ttctgactc cgggacgagc cagtcctagg ctgctcccg gagcacttag ggtatcccg aggccatag gacccactgg gcagtcctctg gacagcctct tggctccagg cccaccgga aagtggacac tggctccgcc ctggccacct ggggactggc actgtggtgc acagtggccc aatgtggcca acggaagttt tataaagac aaaaagtata tcaataaaca tttataact tgc MAGNCSWEAH PGNRNWCPG LSEAPELYSR GFLTIEQIAM LPPAVMNYI FLLCLCGLV P GNGLVWFFG FSIKRNPFSI YFLHLASADV GYLFSKAVFS ILNTGGFLGT FADYRSVCR VLGLCMFLTG VSLLPVSAE RCASVIFPAW YWRRPKRLS AVVALLWVL SLLVTCLHNY FCVFLGRGAP GAACRMHDI LGLILFLCC PLMVLPCLAL ILHVECRARR QRS AKLNHV ILAMSVFLV SSIYLGIDWF LFWFQIPAP FPEYVTDLCI CINSSAKPIV YFLAGRDKSQ RLWEPLRWVF QRALRDGAEL GEAGSTPNT VTMEMQCPPG NAS </p>	Homo sapiens
483	160206	G Protein- Coupled Receptor GPR32	NM_001506	<p> atgaatgggg tctcgagggg gaccagaggc tgcagtgaac ggcaacctgg ggtcctgaca A cgtgatcgct cttgttccag gaagatgaac tcttcggat gcctgtctga ggagtgggg tccctccgcc cactgactgt gttatcctg tctgctgcca ttgtgtcgg agtgcgggc aatgggctgg tgcgtggat gactgtcttc cgtatggcac gcaaggtctc caccgtctgc ttcttcacc tggcccttc cgatttcctg ctctcactgt ctctgcccc tgccatgtac tataattgct ccaggcagtg gctcctcgga gactgggctt gcaactcta cateacctt gtgttctcga gctacttgc cagtaactgc ctctgtgtct tcactctgt ggaccgttgc atctctgccc tctacccgt ctggccctg aaccaccga ctgtgcagcg ggcgagctgg ctggcccttg ggggtggct cctggccgc gcctgtgtct ctgcgacct gaaattccgg acaaccagaa atgggaatgg ctgtacgcac tgcacttgg cgttcaactc tgacaatgag actgccaga ttgtgattga aggggtcgtg gaggacaca ttatagggac cattggccac ttctgctgg gcttccctgg gcccttagca atcataggca cctggcccca cctcatccg gccaagtct tgcgggaggg ctgggtccat gccaccggc ccaagaggct gctgctggg ctggtgagcg cttctttat cttctgtcc ccgtttaacg tgggtgctgt ggtccatctg tgcgacggg tgatgctcaa ggaatctac caccgccga cctcctcat cctccaggct agcttgcct tgggctgtgt caacagcagc ctcaacctt tcctctacgt ctctgtggc agagattcc aagaaaagt ttccagctt ttgacttctg ccctggcgag ggcgtttgga gaggaggagt tctgtcatc ctgtccctg ggcaacgcc cccgggaatg a MNGVSETRG CSDRQGVLT RDRCSRNMN SSGCISEEVG SLRPLTVIL SASIVVGLG P NGLVWMTVF RMARTVSTVC FFHLALADEM LSLSLPIAMY YIVSRQWLLG EWACKLYITE VFLSYFASNC LLVFISVDRG ISVLYPVAL NHRTVQRASW LAFGVMLLAA ALCSAHLKFR TRKWNCGTH CYLAFNSDNE TAQIWIEGV EGHIICTIGH FLGLGFLPLA IIGTCAHLIR AKLLREGWVH ANRPKRLLV LVSAFFIWS PFNVLLVHL WRRVLMKEIY HPRMLLIQA SFALGCVNSS LNPFLYFVG RDFQEKFFQS LTSALARAFG EEFLSSCPR GNAPRE cagcctccct ctccaccctc tgcctcccg ctgcctcttg tctagtgtc gtcaggagct A gactgcctcc aggcctggaa tcctgtgtc cctctgtgcc cagagcccca cgatgtcgcc </p>	Homo sapiens
484	160206	G Protein- Coupled Receptor GPR32	NP_001497.1	<p> gagcctccct ctccaccctc tgcctcccg ctgcctcttg tctagtgtc gtcaggagct A gactgcctcc aggcctggaa tcctgtgtc cctctgtgcc cagagcccca cgatgtcgcc </p>	Homo sapiens
485	160210	G Protein- Coupled	NM_004778	<p> gagcctccct ctccaccctc tgcctcccg ctgcctcttg tctagtgtc gtcaggagct A gactgcctcc aggcctggaa tcctgtgtc cctctgtgcc cagagcccca cgatgtcgcc </p>	Homo sapiens

Receptor
GPR44
(CRTH2)

caacgccaca ctgaagccac tctgccccat cctggagcag atgagccgtc tccagagcca
cagcaacacc agcatccgct acatogacca cgggcccgtg ctgtgcacg ggtggccctc
gctgtgggc ctggtggaga atggagtcac cctcttcgtg gtggctgccc gcatgcgcca
gaccgtggtc accactggg tgtgcacct ggcgtctgac gacctgtgg cctctgttc
cctgcccctc ttacactact tcttgccgtt gggccactgc tgggagctgg gcaccacct
ctgaaactg cactctcca tcttcttct caacatgttc gccagcgct tctgtctcag
cgccatcagc ctggaccgct gctgcaggt ggtgcggccg gtgtgggcg agaaccacg
caccgtggcc gcggcgaca aagtctgctt ggtgcttgg gactagcgg tgtcaacac
ggtgccctat ttctgttctc gggacacct ctgcggctg gacggcgcca ttatgtcta
ctacaatgtg ctgtcctga accggggcc tgaccgcat gccagtgca actgcgcca
ggcgccctg gccgtcagca agttcctgct ggccttcctg gtgcgctgg cgtacatcgc
ctcgaagccac gcggcgtga gctgcggtt gcagaccgc ggcggccgc ggcagggcg
cttcgtgcgc ctggtggcag ccgtcgtggc cgtcttcgag ctctgctgg ggcctacca
cgtgttcagc ctgctggagg cgcggcgcca cgcgaacccg gggctgcggc cgtcgtgtg
gcgcgggctg ccttcgtca cagcctggc cttctcaac agcgtggcca accggtgct
ctacgtgctc acctgcccc acatgctgag caagtgcgg cgtcgtcgc gcagggtgct
ggagagcgtg ctggtggacg acagcagct ggtggcgcg ggaagcagcc gccgcccgcg
cacctctcc accgccgct cggcctccc ttatctctc tgcagccgc cggaggaacc
gcggggccc gcgctctcc tgcgtggt gctggggcag tgcagcagct cccgcgagc
gggcccctg aaccggcgc tgagcagcac ctgcagttag aaccggccc acgtaggcg
gcactcac gcgaagtat caccagggt cgcggttca attcgatc cggactctg
ccgcagtgat caaagtcga gggcggggac ccaggcacct gcattttaa ccgcccggg
agactctgaa tcttttcag aaacagtgag ttaagcagct gcttctcaa ccttgatgtg
cctgtgaatc acctagggt ctgttaagt gcagctgtat ccaggagcc gggcccgggt
actgagatc tgcactaac aagctccag gccgagaagc cagtgcggca ggtcacagg
cgaggccctg agtaacaca agtgaactc gtaatagact tcccactcta gggcagtgga
gtcggaggg cacacgggt gcgtctccc gtagttcagt ttaccagat gatggggag
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tgagaagcac tgtccagcc tgcctcttc attagccaa tgcctactgc gctagacgtt
tcattccaca atcttaagg gcagcttcta ttacagctc ttacagctg agcacttct
ggctcaggga ggttaagtga ctgcccagt ttacgggcta acgaccacag ggtctgact
ctaaccctag gcatcacatg ctcaatgact ctctggtgag cgaggacatt ctctgacct
ctcgaaggac ttaagatgct acctgtgac ccagcactgc ccaaagtgt tccaggcag
aagcagcagg gtagggcgtg tcaagcact cgggaacct gggcctaate aatccaatg
ggggaatatg ctaaaagtct tcggtcgtta gaagtgaat gggcacaga actctaagc
tacagcacac gtatttctt agctaaggc accagctcc ctgtcggcct ggtgttctgt
gggatccctc tgggactgg taatcccaag atctgtgag cccgcctcc aggcacatg
gggctgggca gctaccattt ccttttgcg gatgggagg gtaacttga cctctgacct
atcacttcca ctgcacccc tctcattcct ccactgcgc tggacttgg gtcagagact
gctgtgtttg agctctgcag cccagggacc gaaagttgg tgtcaatgaa tttgtcttg
tggatgaat gtcagtggaa gaagcagatg agaaactctt gagatcttgg tctgtgtttt

486	160210 G Protein- Coupled Receptor GPR44 (CRTH2)	NP_004769.1	MSANATLKPL CPILQMSRL QSHNNTSIRY IDHAAVLLHG LASLGLGVEN GVILFVVGCR P MRQTVVTWV LHLALSDLLA SASLPFTYF LAVGHSWELG TTFCKLHSSI FFLNMFASGF LLSAISLDRG IQVVRPWAQ NHRVTAAAHK VCLVWLWALV LNTVPYFVR DTISRLDGRI MCYNNVLLN PGPRDRATCN SRQAALAVSK FLLAFIVPLA IIASSHAHSV LRLQHRGRRR PGRFVRLVAA VVAFAFALCWG PYHVSLEA RAHANPGLRP LVWRGLPFVT SLAFNSVAN PVLVLTCPD MLKRLRSLR TVLESVIVDD SELGGAGSSR RRRSTSTARS ASPLALCSRP EEPRGPALL GWLLGSCAAS PQTGPLNRL SSTS	Homo sapiens
487	160212 G Protein- Coupled Receptor GPR52	NM_005684	atgaatgaat ccaggtggac tgaatggagg atcctgaaca tgaagcagtg cattgtgaat A gggtccgagc gtcactcttg cccaactgga ttgggccact acagtgtggt ggaatgtctgc atcttcgaga cagtgttat tgtgtgctg acattctga ttatgtctg gaatctaaca gttatcttg ccttccattg tgcaccactg ttacatcatt atactaccag ctatttcatt cagacgatgg catatgotga tctttcgtt ggagttagct gcttggttcc tactctgtca cttctccact actccacagg tgtccacag tcattaactt gccgggtttt tggatatatc atctcagttc taaaagttg ttctatggca tgccttgctt gcacagtggt ggaatgttat cttgcaataa ccaagcctct tctctacaat caactgggtca ccccttgctg cttgagaatt tgcattattt tgacttgat ctactcctg ctaattttct gctctcctt ttttggctgg gggaaacctg gttaccatgg tgacattttt gaatggtgtg ccacgtcctt gctcaccagt gcctatttta ctggctttat tgtttgctta cttatgctc ctgctgctt tgttctctgc ttcactact tccacattt caaaatttgc cgtcagcaca ccaaagagat aatgaccga agagccgat tccctagtca tgaggtagat tctccagag agactggaca cagccctgac cgtcgtacg ccattgtttt gtttaggata accagtgtat ttatatgct gttgctccc tatataattt actttcttct agaaagctcc cgggtcttgg acaatccaac tctgtccttc ttaacaacct ggcttgcatg aagtaatatg ttttgaact gtgtaataata cagcctctcc aacggcgttt tccggctagg cctccgaaga ctgttgaga caatgtgcac atcctgtatg tgtgtgaagg atcaggaagc acaagaacc aaactaggga aacgggctaa tcttgcctcc attga	Homo sapiens
488	160212 G Protein- Coupled Receptor GPR52	NP_005675.1	MNESRWTEWR ILNMSSGINV ASERHSCPLG FGHYSVDVC IFETVVIVLL TFLIAGNLT P VIFAFHCAPL LHYYTTSYFI QTMAYADLEV GVSCIVPTLS LHHYSTGVHE SLTCRVFGYI ISVLKSVSMA CIACISVDYR LAITKPLSYN QLVTPCLRRI CIILTWIYSC LIFLPSFFGW GKPGYHGDIF EWCATSWLTS AYTFGIVCL LYAPAAFVC FTYHFIFKIC RQHTKEINDR PARFPSHEVD SSRETHSPD RRYAMVLFRI TSVFYMWLP YIYFLELSS RVLDNPTLSF LTTWLAVSNS FCNCVITYSL NGVFRLLGLRR LFETMCTSCM CVKQEAQEP KPRKRANSCS I	Homo sapiens
489	160217 G Protein- Coupled	NM_005683	atgagtcagc aaacaccag tggggactgc ctgtttgacg gtgtcaacga gctgatgaaa A accctacagt ttgcagtcga catcccacc ttcgtctcgg gcctgtcctt caactgctg	Homo sapiens

490	160217 G Protein- Coupled Receptor GPR55	NP_005674.1	gccaaccggt cttccctaaag aacaggtggc ccgattatgc tgcaacctcc atctacatga tcaacctggc agtctttgac ctgctgctgg tgctctccct cccattcaag atggctctgt ccaggtaca gtcccccctt ccgtccctgt gcacctgggt ggagtgctt tacttcgtca gcatgtacgg aagctcttcc accatctgt tcatcagcat ggaccggttc ttggccatcc gttaccgct actggtgagc cactccggtc cccaggaag atctttggga tctgcatga caatctgggt cctggtggtg accggaagca tccctatcta cagtttccat gggaaagtgg aaaaatacat gtgcttccac aacatgtctg atgatactg gageccaaag gtctttctcc cgctggaggt gtttggttc ctccttccca tgggcatcat gggcttctgc tgctccagga gcatccacat cctgctgggc cgcgagacc acacocagga ctgggtgcag cagaaacct gcatctacag catcgagcc agctgggtg tattctgggt ctcttcttc ccagtcacc tgggttctt cctgcagttc ctggtgagaa acagctttat cgtagagtgc agagccaagc agagcatcag cttctcttgg caatgtcca tgtgttctc caatgtcaac tgctgcctgg atgtttctg ctactactt gtcataaaag aattccgcat gaacatcagg gccaaccggt cttccaggtt ccagctgggt ctgcaggaca ccagatctc ccggggctaa IYMINLAVFD LLLVLSLPEK MVLQVQSPF PSLCTLVECL YFVSMYGSVF TICFISMDRE LAIRYPLIVS HSGPPGRSLG SACTIWLWV TGSIPYSEH GKVEKYMCFH NMSDDTWSAK VFFPLEVFGF LLPMGINGFC CSRSIHLLG RRDHTQDWVQ QKACIYSIAA SLAVFVVSFL PVHLGFFLQF LVNRSFIVEC RAKQISFFL QLSMCFSNVN CCLDVFCYFF VIKFPMNIR AHRPSRVQLV LQDTTISRG	Homo sapiens
491	160219 G Protein- Coupled Receptor GPR35	NM_005301	atgaatggca cctacaacac ctgtggctcc agcacctca cctggcccc agcatcaag A ctgggcttct accctactt gggcgtctct ctggtgctga cctgtctgct caacagcctg gcgctctggg tgttctgctg ccgcatgacg cagtgagcgg agaccgcat ctacatgacc aacctggcgg tggcgacct ctgctgctg tgacattgc cctctgctg gcatctccctg cgagacacct cagacacgcc gctgtgccag ctctccacgg gcatctacct gaccaacagg tacatgagca tcagcctggt cagggccatc gccgtggacc gctatgtgc cgtgcggcac ccgtgcgtg cccgcgggtt gcggtccccc aggcaggctg cggcctgtg cgcggtctc tggtgtctgg tcatcggtc cctgtgggt cgtgtgctc tgggattca ggaggcggc ttctgctca ggagaccgg gcacaattc aactccatgc ggttcccgct cgtggattc tacctgccc tggcgtggt ggtcttctg tccctgaagg tggtagctgc cctggcccag aggccaacca ccgacgtggg gcaggcagag gccaccgca aggtgcccc catggtctgg gccaacctcc tgggttctg ggtctcttc ctgcccctgc acgtggggt gacagtgcgc ctcgcagtg gctggaacgc ctgtgcccct ctggagacga tccgtgcgc cctgtacata accagcaagc tctcagatgc caactgtgc ctggacgcca tctgtacta ctacatggcc aaggagtcc aggagcggtc tgcactggcc gtggtcccc gtgctaagg ccacaaaagc caggactctc tgtcgtgac cctcgctca	Homo sapiens
492	160219 G Protein- Coupled Receptor GPR35	NP_005292.1	NLAVALCLL CTLPFVLHSL RDTSDPLCQ LSQGIYLTNR YMSISLVTAI AVDRVAVVRH PLRARGLRSP RQAAAVCAVL WVLVIGSLVA RWLLGQEGG FCFRSTRHNF NSMRFPLLGE YLPNAVVFEC SLKVVTALAQ RPPTDVQAE ATRKARMWV ANLLVFVCF LPLHVGLTVR LAVGNACAL LETIRRALYI TSKLSDANCC LDAICYMYA KEFQESALA VAPRAKAHKS	Homo sapiens

493	160221	G Protein- Coupled Receptor GPR27	NM_018971	QDSLCTVIA	atggcgaacg cgagcagcc gggtagcagc ggcggggcgc aggcggcgcg cctggggcctc A aagctggcca cgctcagcct gctgctgtgc gtgagcctag cgggcaacgt gctgttcgcg ctgtgacg tgcgggagcg cagcctgcac cgcgccccgt actactgct gctcgacctg tgcttgccg acgggctcgc cgcctgcgc tgcctcccg ccgtcatgct ggcggcgcg cgtggggcg cgcggcgcg ggcgcgcgc ggcgcgcgc gctgcaagct gctgccttc ctggcgcgc tctctgctt ccagcgcgc tctctgctc tgggctggg cgtcaaccgc tacctggcca tgcgcacca ccgctctat gcagagcgc tggcggcgtg gccgtgcgc gccatgctgg tgtgcgcgc ctggggcgtg gcgtgccc cggcctccc gccagtgtg gacggcggtg gcgacgacga ggcgcgcgc tgcgcctcg agcagcgcc gccagcgcc ccggcgccg tgggcttct gctgctgct gccgtggtg tgggcgccac gccctcgtc tacctccgc tgcctctt catccagc cgcgcgaaga tgcggccgc gcgctggtg ccgcgctca gccacgact gacctccac ggcgcggcg ccacggcca ggcggcgc aactggacg cgggcttcg ccggggccc acgcgcgcg cgttgtggg catccggcc gcaggcgcg gcgcggcgc gcgcgcctc ctgctgctg aagaattcaa gacggagaag aggctgtca agatgttcta cgcgtcacg ctgctcttc tgcctctg gggccctac gtcgtggcca gctacctgc ggtcctggt cggccgcgc ccgtcccca ggcctacctg acggcctcg tgtgctgac ctgcgcgcg gccggcatca acccgtcgt gtgctctc ttcaacagg agctgagga ctgcttcagg gccagttcc cctgtgcga gagccccgcg accaccag cgaccatc ctgcgacct aaaggcattg gttatga 494 160221 G Protein- Coupled Receptor GPR27	NP_061844.1	MANASEPGS GGEEAALGL KIATLSLLC VSLAGNVLFA LLIVRERSLH RAPIYLLLDL P CLADGLRALA CLPAVMLAAR RAAAAGAPP GALGCKLAF LAALFCFHA FLLGVGVTR YLAIAHRRFY AERLAGWPCA AMLVCAAWAL ALAAAPPPVL DGGDDDEDAP CALEQRPDGA PGALGFLILL AVVGATHLV YLRLLFFIHD RRMRRPARLV PAVSHDWFH GPGATGQAAA NWTAGFRGP TTPALVGIRP AGPGRGARRL LVLEEFKTEK RLCKMFYAVT LFLLLWGPY VVASYLRLV RPAVPPQAYL TASVWLTFQ AGINPVVCFI FNRELDCFR AQFPCCQSPR TTQATHPCDL KGIGL	Homo sapiens
495	160222	G Protein- Coupled Receptor GPR72	NM_016540		atgggtccctc acctcttgcct gctctgtctc ctccccctgg tgcgagccac cgagccccac A gagggccggg ccgacgagca ggcgcggag gcggccctgg ccgtgcccac tgcctcgac ttcttctctt ggaacaacta cactttccc gactggcaga acttgtggg caggaggcgc tacggcgctg agtcccagaa ccccacggtg aaagccctgc tcattgtggc ttactcttc atcattgtct tctcactct tggcaacgct ctggtctgtc atgtcatctt caagaaccag cgaatgcact cggccaccag cctcttcac gtcaacctgg cagttgcga cataatgatc acgtgtctca acacccctt cactttggtt cgcttgtga acagcacatg gatattggg aagggeatgt gccatgtcag ccgctttgcc cagtaactgt cactgcacgt ctgcacactg acactgacag ccattgcggt ggatcgccac caggtcatca tgcacccctt gaaaccccg atctcaatca caaagggtgt catctacac gctgtcatct ggaccatggc tacgttctt tcactccac atgtatctg ccagaaatta tttaacctta aatacagtga ggacattgtg cgctccctct gctgcccaga ctctccctgag ccagctgacc tctctggaa gtacctggac ttggccacct tcatctgct ctacatctg cccctctca tcatctctgt ggcctacgct	Homo sapiens		

Homo
sapiens

496 160222 G Protein- Coupled Receptor GPR72 NP_057624.1
 MYPHLLLLCL LPLVRATEPH EGRADQSAE AALAVPNASH FFSWNYTFS DWQNFVGRRR P
 YGAESQNTV KALLIVAYSF IIVFSLFQNV LVCHVIFKQ RMHSATSLFI VNLAVADIMI
 TLINTPTFLV RFNSWTFIF KGMCHVSREA QYCSLHVSAL TLTAIVDRH QVIMHPLKPR
 ISITKGVII AVIWTWATFF SLPHAIQOKL FTFKYSIEDIV RSLCLPDFPE PADLEWFKYLD
 LATFILYIL PLLIISVAYA RVAKLWLNC MIGDVTEQY FALRKKKKKT IKMLMLVVVL
 FALCWFFLNC YVLLSSKVI RTNNALYFAF HWFAMSTCY NPFIYCWLINE NFRIELKALL
 SMCQRPPKPQ EDGQPSVPVS FRVAWTEKND QQRAPLANNL LPTSQIQSGK TDLSSVEPIV
 TMS

Homo
sapiens

497 160223 G Protein- Coupled Receptor G2A NM_013345
 gggagggggtg cgaggctagc cagcagggcg gggccctggg tcatittaaa ctctcagagt A
 gaacgtcttg ataggaccga caagagcgat gacatgtact tagatagctt atcttagagc
 cacactgaga ttggaacccg caaataatgc caggaggaa ggtgagcaag ggacacgaca
 ctcacccgga taaccccaac aagcgagcg aggtgtgtgg gaaacggan cctgcacac
 cgccggggga aggtggccn ccgcaccac cgtggaagaa cagcgcgan gaccccaag
 agatgagacg gaactgocgt gagatccagc aatnconact gtggtctga cccaggatan
 cggaagacag ggacgtgaac agcctcctc atgtctctga caccgtcatt ctacgagct
 cagctaaggc acagagcgag ccgagcgctc gtcagcagag tcgtggctga gcagaacacg
 ccacaccca cagccacac gccacacgtg caggattgct caagatggaa gggcacagt
 gaataatat atatatatt attttggcg agacctgga ggacacactg aatacaatgg
 aataccatcc cgcctttgaa aggaaggaa atcctggcac acgtgcaac aggaggggagc
 ttgaggacac tgtgtgagt ggagcacgtg agacacggaa ggacacacgc tgaagacacg
 cagagatgcc caccacgtg gggaggtgac agggagccc agcgacaga gacaaagtgg
 aatggaggcc tgggggctgg gagcaaatgc ggagcgagt ctctctgggg cagagtctcc
 gtttgggaag atgagaaggt tctgcgacg gatgtggcg atggttgac aagaatgtga
 atgtgccaa tgcactgaa aaacggttac aatgaaacg ccacccagt gaccaccact
 gccccgtggg cctccctggg cctctccgc aagacctga caaacgtgtc ctctgaagag

498	160223	G Protein- Coupled Receptor G2A	NP_037477.1	<p>agcaggatag tctgtgtcgt ggtgtacagc gcggtgtgca cgtggggggt gccggccaac tgccctactg cgtggctggc gctgtgcag tactgcag gcaagtgct gccgtctac ctgtctgcc tggactctg cgagctgtg tacacaggca cgtgccact ctggctcacc tatatecga accagaccg ctggacccta ggcctgtgtg cctgcaaggt gaccgctac atcttctct gcaacatcta cgtcagcacc ctcttctgt gctgcatctc ctgcgaccgc ttcgtggccg tgggtacgc gctggagagt cggggccgc gccgcggag gaccgccac ctcatctcg cctgcattt catctctgtc gggatcgttc actaccgggt gtccagacg gaagacaagg agacctgctt tgacatgctg cagatggaca gcaggattgc cgggtactac tacgccaggt tcaccgttg cttgccacc cctctctcca tcatcgctt caccaccac cggatttca ggagcatcaa gcagagcatg ggcttaagcg ctgccagaa gccaagggtg aagcactcgg ccacgcggt ggtgtcacc ttctagtct gcttgcgcc gtaccacctg gttctctcg tcaagccgc tgcctttcc tactacagag gagacaggaa cgcctgtgc ggcttgagg aaaggtgta cacagcctct ggtgtgttc tgtcctgtc caggtgaac ggcgtgctg acccattat ctacgtgctg gccaggacc attcccgcca agaagtgtcc agaatcata aggggtggaa agagtgtcc atgaagacag acgtcaccag gctcaccac agcaggaca ccgaggagct gcagtcgcc gtggcccttg cagaccacta cacttctcc aggccctgc acccaccagg gtcaccatgc cctgcaaga ggcctgattga ggagctctgc tgagccact gttgtggcagg gggatggcag gttgggggtc ctggggccag caatgtggtt cctgtgact gagccacca gccacagtc ccatgtccc tctggaagac aaactaccaa tttctcgtc ctgaagccac tccctcgtg accactggcc ccangcttcc ccacatggaa ggtggtgca tggcaaggcg aagagcgaca cctccaggct tccggagcc canagagcat gtggcangca gtgggacctc ttcatcatca nctgacctg ctggctccct tggctgtggg cangtacacc cctgtcggca gaagtacctg gtgctgcgcc tgttcgcac agtggcgatg actttattg cggagcatt ctgcaagcgt tgcctggatg cgggtgtgca ttgtgggcc tctggctcc tgcctcaaaa tgtcagtgag caccatgctg gaagtcacca tcactgtggc agcggccagg aagcctagg gcanccctacc acctccaang gggcangcgc cctcatctgg ggttgggt</p>	Homo sapiens
499	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NM_004767	<p>CITAWLALLQ VLGQNVLAIV LCLALCELL YTGTLPLWVI YIRNQHRWTL GLLACKVTAY IFFCNIVSI LFLCCISCDR FVAVVVALES RGRRRRTAI LISACIFILV GIVHYPVFQT EDKETCFDML QMDSRIAGY YARFTVGFAI PLSIIAFTNH RIFRSIKQSM GLSAAQKAKV KHSIAIVVI FLVCFAPYHL VLLVKAASF YVRGRNAMC GLEERLYTAS VVFLCLSTVN GVADPIIYVL ATDHSROEVS RIHKGWKEWS MKTDVTRLTH SRDTEELQSP VALADHYTFS RPVHPGSPC PAKRLIEESC</p>	Homo sapiens

500	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NP_004758.1	<p>accgagagct cctacagtgc ctatgccatc atgtctcttg cgtggtggtg gtttgcgggtg ggcattgtgg gcaacctgtc ggtcatgtgc atcgtgtggc acagtacta cctgaagagc gcttgaact coactcttg cagctggcc cctggtgatt tctgtgtctt cttttctgc ctccctattg tcatctcaa cgagatcacc aagcagagc tacttgggtga cgtttcttgt cgtgcggtgc cttcatgga ggtctctct cttggagtca cgactttcag cctctgtgcc ctgggcattg accgttcca cgtggccacc agacctgc ccaagtgtag gccatcgag cgggtccaat ccactctggc caagtgtgct gtcactggg tgggtccat gacgtggct gtgctgagc tctgtgtg gtagctggca caggagcctg cccaccat gggaccctg gactcatgca tcatgaacc ctacgccagc ctgcccagt cctgtatc actggtgatg acctaccaga acgcccagc gtgtgtgtac ttgtgtgctg cttctgctt gccatcctc ttcacagtca cctgccagc ggtgacatgg cgggtgtag gctctccag gaggaagtc gagtgcaggg ccagcaagca ctagcagtg gtagcagtg tcaacagcac cgtgtgggc ctgaccgtgg tctacgctt ctgaccctc ccagagaacg tctgcaacat cgtgtggcc tacctctcca ccgagctgac ccgccagacc ctggacctc tgggctctat caaccagttc tccacctct tcaaggcgc caccacca gtgtgtgtcc ttgcatctg cagccgctg ggccagcct tctgtgactg ctgtgtgtg tgtgtgtg aggagtggc cgggctctg gagcctctg ctgccaatg gtgggacaac aagctcaaga ccgaggtgtc cttctccatc tacttccaca agccaaggga gtcacccca cttctgccc tgggcacac ttgtgaggc ccagtaggg gtgggaggg agggagaggg cgcaacccc gccgtgtct gctgtcttt ccccataggt cttgtcttgt tgcctgtctt gctgtctagg gatgacttg gttcctctg tcaaggttg ggaatccg</p>	Homo sapiens
501	160225	Sphingolipid Receptor Edg6	NM_003775	<p>gagtcagccc ccgggggagg ccatgaacgc cagggggacc ccggtggccc ccgagtcctg A ccaacagctg gcggccggcg gccacagcg gctcattgtt ctgcactaca accactcggg ccggtggcc ccggcgggg gcccgaggga tggcgccctg ggggcccgc ggggctgtc ggtggccgc agtgcctgg tgggtgtgga gaactgtgtg gtgtggcg ccataccag ccacatggcg tcgagacgt ggttacta ttgctgtgtg aacatcacg tagtgacct gtcacgggc gcggcctacc tggcacaagt gctgtgtg ggggccgca cttccgtct ggcgccgc cagtgttcc tacggaggg cctgtctt accgccctg ccgctccac cttcagcctg ctttccactg caggggagcg ctttgcacc atggtgcggc cgggtggcga gagcggggc accaagacca gccgctcta cggcttcat ggcctctgt ggtgtgtg cgcgtgtg gggatgtg cttgtgtgg ctggaactgc ctgtgcgct ttgacctg ctccagcct ctgcccctct actccaagcg ctacatcctc ttctgcctg tgatcttgc</p>	Homo sapiens

502	160225	Sphingolipid NP_003766.1	Receptor Edg6	<p> cggcgtctg gccaccatca tgggctctta tggggccatc ttccgcttgg tgcaggccag cgggcagaag gcccacgcc cagcgcccc cgcgaagcc cgcgcctgc tgaagacggt gctgatgac ctgctggcct tctgtgtg ctggggccca ctctcgggc tctgtctggc cgactcttt ggctccaacc tctggccca ggaatcctg cgggcacatg actggtacct ggcctggcc gtctcaact cggcggtcaa ccccatcct tactcctcc gcagcaggga ggtgtcaga gccgtgctca gcttctctg ctgcgggtgt ctccgctgg gcatgcgagg gcccggggac tgcctggccc gggcgtcga ggctcactcc ggagcttcca ccacgacag ctctctgagg ccaaggaca gctttcgcg ctcgcgctg ctacgcttcc gtagcgggga gcccctgtcc agcatctcca gcgtgcggag catctgaagt tgcagtcttg cgtgtggatg gtgcagccac cgggtgcgtg ccagcgagg cctcctggg tacaggaagc tgtgtgcacg cagcctgcc tgtatggga gcaggaaac ggacaggccc ccatggtctt cccggtggcc tctcggggct tctgacgcca aatgggcttc ccatggtcac cctggacaag gagttaacca ccccacctc ccgtaggagc agagagcacc ctggtgtggg ggcgagtggg tcccacaa cccgctctg tgtgattctg gggaaatccc ggcctctc tggcctcag tagggctccc aggctgcaag ggggtgactg tgggatgcat gccctggcaa cattgaagt cgtcatggt aaaaa VLENLVLAA ITSHMRSRW VYCLVNITL SDLLGAAYL ANVLSCART FRLAPAQWFL REGLLFTALA ASTFSLFTA GERFATMVRP VAESGATKTS RYGFGLGW LLAALLGMLP LLGNWCLCAF DRCSLLPLY SKRYILFCLV IFAGVLATIM GLYGAIFRLV QASGQKAPRP AARRKARLL KTVLMILLAF LVCWGLFGL LLADVFGSNL WAQEYLRGMD WILALAVLNS AVNPITYSFR SREVCRAVLS FLCGCLRLG MRPGDCLAR AVEAHSGAST TDSSLRPRDS FRGSRSLSFR MREPLSSISS VRSI </p>	Homo sapiens
503	160228	T-Cell Death-Associated Gene 8 (GPR65)	NM_003608	<p> atgaacagca catgtattga agaacagcat gacctggatc actattgtt tccattgtt tacatcttg tgattatag cagcattcca gccaatattg gatctctgtg tgtgtcttc ctgcaaccca agaagaaag tgaactagga atttacctct tcagttgtc actatcagat ttactctatg cattaactct ccttttatg attgattata ctggaaataa agacaactgg actttctc ctgccttg caaaggagt gctttctca tglacatgaa gttttacagc agcacagcat tctcactctg cattgcggt gatcggtatt tggctgtgt ctacctttg aagtttttt tccaaaggac aagaagaatt gcaactatg tcaagctgtc catctggata ttggaaacca tcttcaatgc tgatcatgtg tgggaagatg aaacagtgt tgaatattgc gatgcgaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa atcaacctca acttggtcag gacgtgaca ggctatgcaa tacctttggt caccatcctg atctgtaacc ggaagtcta ccaagctgtg cggacaataa agccacgga aaacaaggaa aagaagagaa tcataaaact actgtcagc atcacagta ctttgtctt atgtttact ccctttcatg tgatgtgtc gattcgtgc atttagagc atgctgtgaa cttcgaagac cacagcaatt ctgggaagcg aacttacaca atgtatagaa tcacggttgc ataacaaat ttaaattgtg ttgctgatcc aattctgtac tgtttgtta ccgaacagg aagatatgat atgtggaata tattaaaatt ctgcactggg aggtgtaata catcacaag acaagaaaa cgcatacttt ctgtgtctac aaaagatact atggaattag aggtccttga gtag </p>	Homo sapiens

504	160228	T-Cell Death- Associated Gene 8 (GPR65)	NP_003599.1	MNSTCIEEQH DLDHYLFPPIV YIFVIIVSIP ANIGSLCVSF LQPKKESELG IYFLSLSLSD P LLYALTPLPW IDYTWNKDNW TFSPALCKGS AFLMYMKFYS STAFLTCLAV DRYLAVVYPL KFFFLFRRI ALMVSLSIWI LETIFNAVML WEDETVEYC DAEKSNFTLC YDKYPLEKWQ INLNLFRTCT GYAIPLVIL ICNRKVYQAV RHNKATENKE KKRIIKLLVS ITVTFVLCT PFHMLLIRC ILEHAVNFED HNSGKRITYT MYRITVALTS LNCVADPILY CFVTETGRYD MWNILKFTG RCNTSQQRK RILSVSTKDT MELEVL	Homo sapiens
505	160300	Encephalopsi n	NM_014322	cgagccccc cgcaagctga ggcctccgc cgcceagggc gcgcggcgcc gggccatgta A ctcggggaac cgcagcgccg gccacggcta ctgggacggc ggccggggccg cggggcgctga ggggcggcg cggcgggga cactgagccc cgcgccctc ttcagcccc gcacctacga gcgcctggcg ctgctgctgg gctccattgg gctgctgggc gtcggcaaca acctgctggg gctcgtctc tactacaagt tccagcggt cgcactccc actcactcc tccctggtcaa catcagctc agcgacctgc tgggtccct ctgcggggtc accttacct tctgtctctg cctgaggaac ggctgggtgt gggacacctg gggctgctgt tgggacgggt tttagcgccag cctcttcggg attgttcca ttgceacct aacctgctg gcctatgaac gttacattcg cgtgtccat gccagagtga tcaattttc ctggcctgg agggccatta cctacatctg gctctactca ctggcgtygg caggagcacc tctctggga tggaaacaggt acatctgga cgtacacgga ctaggctgca ctgtggactg gaaatccaa gatgccaac attcctcctt tgtcttttc ttattcttg gctgctggt ggtgccctg ggtgctcatag cccattgcta tggccatatt ctatatcca ttcgaatgct tctgtgtgt gaagatcttc agacaattca agtatacaag attttaaat atgaaaaga actggccaaa atgtgctttt taatgatatt cacctctctg gctgtgtgga tgccttatat cgtgatctgc tcttgggtg ttaatgggtca tggtaacctg gtcactccaa caatatctat tgtttcgtat ctcttgcta aatgaaacac tgtatacaat ccagtattt atgtcttcat gatcaaaaag ttccgaagat ccttttgca gcttctgtgc ctccgactgc tgagtgcca gagcctgct aaagacctac cagcagctgg aagtgaatg cagatcagac ccattgtgat gtcacagaaa gatggggaca ggccaaagaa aaaagtgact ttcaactctt ctccatcat ttttatcatc accagtgatg aatcactgtc agttgacgac agcgacaaa ccatgggggt ccaaagtttg atgttaatcc aagttcgtcc tttgtaggaa tgaaggatgg caacgaagtg tgggacctta aattgagtc cacttttggg ctttcatcat cctcctgaag aagaagtgc tggaaatccc gtctatgta atatcaacag aaccttgttg tccagcagga aatccgaatt gcccatatgc tcttgggctt caggagaggg ttgaacaaa acaaatctt ttaattcaac ggggtgttta cataatgaaa aaaccttg tgcacagat gggcatctaa catcatcatc ttctaattgt ttggagattt tcatttcaa tatattttt aaattactct attttccaa acacgtaatg cattttctc gaaaatacct tactgtaaa ataactgtcg cgtacacatg tgtgaagtatg ctagaacata ctgaattttt tttgtactgt tggactctat tcaagtctat gtcctatgc tgatcaagt atcaaggaga taattctaga atgaaaaaga aaatcctctt gttggaaca aagacgttt tatatgtga gtatgacaaa gaggaatttc agagacaact ttgaatcctt gtcagcctgg agaccagcac cagaggaatc tacaaggcaa actcccatat atttgcttcc cccaaattgc tgccccata gactcaagc tcttttctt tgtttgttg tttctctaaa aatttactgt tctttgtcga tgtatatataa gccaggagat tctaagcgc cagctctttg agattgtctc attccctgt atttccaca tatatatatc atataccgc taataaattt atgtttgttt taaaaaaa	Homo sapiens

506	160300 Encephalopsi n	NP_055137.1	MYSGNRSGGH LVVLVYKFKQ TITVLAERY LDVHGLGCTV IQVIKILKYE NTVYNPIYV KKKVFENSSS	AEGPAPAGTL WNISLDLLV IRVVARVIN SFVLFLGCG KKLAKMCFM FMIRKFRSL LSVDDSDKTI	SPAPLESPGT SLFGVTFTFV FSWAWRAITY LVPLFLGCV YIVICFLVN CQPAKDLPA GVQSLMLIQV	YERLALLGS SCLRNGWWD IWLYSLAWAG CYGHILYSIR GHHLVTPTI AGSEMQRPI RPL	IGLLGVGNL TVGCWVDGFS APLIGNWRYI MLRCVEDLQT SIVSYLFAKS VMSQKDGRDP	Homo sapiens	
507	160312 Sphingolipid Receptor Edg5	NM_004230	atgggcagct accaaggaga gtcatcctct aacagcaagt ctggcaggcg acgcctgtgc ttcagcctcc ggcagcgaca gtccctggtg actgtccctgc atccctgttg gtgacatagg gtctttatcg gtccactcct cggccgctgc ccgggccaac ccacagtcac	gtactcggga cgctggaaac gttggtccat aatgtacctg agccaatacc cggggagggc cattgagcgc catgcttctg ccttggtcctg gcttgcccat ctctctacgc cctgtacgtg gacgtacagc gcccgccttc ctacaaagcc ctacacgttg gcccgggggtg actccctgcc ccaggtttct	gtactcggga cgctggaaac gttggtccat aatgtacctg agccaatacc cggggagggc cattgagcgc catgcttctg ccttggtcctg gcttgcccat gctctacgc cctgtacgtg gacgtacagc gcccgccttc ctacaaagcc ctacacgttg gcccgggggtg actccctgcc ccaggtttct	ccccacaagg acctcccgcc aaccttcctg tctctctctg tctgctctca tctgcctcca ttgccaaagt ctcatcggtg acctcggtg aacgtcctg gtgctgtgcg cgcatctact ctgctcaaga agcatcctcc cactactttt cgagccggcg gggtgtcaag tccagctccc tgagagggcg acggtgtctt	ctataattat ggccttcac tgctaatgc ctccgacctg gctctgtcac tcaagctctc ggcctctgtc caagctgtat catctcgctg ggcactctga ggctgacctc tgggtacctg ggctggctcc ctcaagccac cggteaccat tgcctgtccc tcgcctgtctc caccctgaat ggaggtgctt gacggaggcg ggctggggacc tgagagggcg catgcacatg	Homo sapiens	
508	160312 Sphingolipid Receptor Edg5	NP_004221.1	MSGLYSEYLN NSKFHSAMYL FSLIAIAIER TVLPLYAKHY VFIVCWLPAP	PNKVQEHYNY FLGNLAASDL HVAIAKVKLY VLCWTFISI SILLLDYACP	TKETLETQET LAGAFVANT GSDKSCRMLL ILLAIVALYV VHSCPIIYKA	TSRQVASAFI LLSGSVTLRL LIGASWLISL RIYCVVRSSH HYFFAVSTLN	VILCCAIVE TPVQWFAREG VIGGLPILGW ADMAAPQTLA SLNPIVYTW	NLLVLIAR P SASITLSASV NCLGHLEACS LLKTVTIVLG RSRDLRREVL	Homo sapiens
509	160314 G Protein- Coupled Receptor GPR103	AF411117	RPLOQWRPGV atgatctgct ggcattgtat gcccactgcy acagcaatgc aacctgacgc gagctgcccg gcaactcttg gtcaccaca	GVQGRRRVGT gcagtgctct tagcaaaactc ggggaaatgt aggcgcttaa ggagcagatt gacgcgcaaa gctggccctc ggtgtttctac	PGHLLPLRS gagccctagg atcactagac cattggcctg cattaccccg catcgtctct gctggcctc gtgtctacac gtgtgtctac	TTTTTLEGN cttttcaccc acgacacgta gcccccgctc ctcggtgtct gacgcgtcgt gacgcgtcgt gacgcgtcgt gtgtgtacac	tagcctgact ctacgttgta ccgggagcgc gcgggaccac ctacaccca cttcgccctg catgcgcacc gtcctcatcg ctccttgctg	Homo sapiens	

510 160314 G Protein- Coupled Receptor GPR103 ENSMPRT2217 53
 RKIKYDFLYE KEHICGLEEW TSPVHQIYTFILVILFLL PLMVMILLYS KIGYELWIKK P
 DDVTIRMIFA IVQIIIGFSNS ICNPIVYAFM NENFKKNVLS AVCYIVNKT FSPAQRHGNS sapiens
 GITMMRKKAK FSLRNPVEE TKGEAFSDGN IEVKLCEQTE EKKKLKRHLA LFRSELAENS

511 160317 Neuropeptide NM_004885
 FF 2 Receptor
 tctggagcca agtaatgggt atactgatgc ttcctttct ttgcgcgct cggattctga A Homo
 gtttcacaag atgttacctg ggtgcccctt agcggatat gaatagcttc ttcggaaccc sapiens
 cagcgccag ctgggccctc ctggaagtgc agctctcat tgcaccggag aaggaggcgg
 ggagggagcg cagagcactc agcgtccagc agcgcggcgg gccagccctgg agcggaagcc
 tggagtggag caggcagtc ccggggggaca gacgtcggct gggattgagc cggcagactg
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 atattatgc agtatggcca ttggaaaaca cgaatgcaa gatcagtga ttggtccagg
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 gtgtgtgcta ccttttaa ccaagctca ctatcaagac agcgtttgtc attattatga
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 acatctacct ggctccctc tccctcattg tcatcatgta tgggaaggatt ggaatttcac
 tottcagggc tgcagttcct cacacaggca ggaagaacca ggaagagtg cactgtgtgt
 ccaggaaaaa gcagaagatc attaagatgc tcctgattgt ggcctgtctt ttattctctt

Homo sapiens

514	160324	G. Protein- Coupled Receptor GPR86/GPR94/ P2Y13	NP_076403.1	<p>ttttattgatg agacttcctg agataatgtg gaaatacaat ttaaccaaga aaaaaagatt ggaacaaatg ctctcttaca ttttattatc ctggtgtaca gaaagatta tataaaattt aaatccacat agatctattc ataagctgaa tgaaccatta ctaagagaat gaaacaggat acaaatggcc actagaggtc attattctt tctttctttt tttttttttt aatttcaaga gcatttcact ttaacatttt ggaagagact aaggagaaac gtatatccct acaaacctcc cctccaaca ccttccaca tcttttcca caattccat aacactactg cttttgtgcc ccttaaatgt agatatgtgc tgaagaaaa aaaaaagcc caactcttga agtccattgc tgaaaactgc agccaggggt tgaagggat gcagacttga agagtctgag gaactgaagt gggtcagcaa gacctctgaa atccctggga aagattttc tccataaat tacaacagc ctctttcaca ttacaataat ataccatagg aggcacagc accattatta agccactttg cttacacctt aagtgtgtac aattcaagt tgagatgtc gtgttaacta tctttggaa ttctccttct gtccagcaa tactotaatg atgtttaa atggcaccta ctcagcaatg ccttccctga ccacaacccc taccctctg cccacccctc ctcaataaaa acaataactt ctactgttg ggtgtgtgat aggttctca atgcagatct ccttttcta gttagctata ttcttgactg catccgctaa aaatgttaa gcttcttgag agacagacat gccagatttt cttggtatct ccataatac gacctacagt ccatgttcta cagatgtttt aaatagaatt gctattctcg acatacaca agacgtaatt gctgacccac aatcagtaac atccatattg ggagattttt caaagatgg tgacctgct tgtatttatt taccttgga tttttcttg catccttctg tgattcaaaa agtaaaaaatg tggctttctg aaatgatgga taagagtcta catcctctag aaaaaataca taaaggagta gtaagctct gtaaatgtgc cacgagctcc aacacgacca tcgtaggggt agccacagct tttcttccat ggcctcaag gccctagaac ttgectacct tctggcctt acctctagc tactatacca tctcttgaac tttatactct tgtataaatt tctaacttcc agaaatgcc atactctgt ttggcaccac acatgtatat ttcccccctg tacacttga agactcttat ccatctgtga aacctatgt tgcatacact tgggtccatga aatattacct ggccaatata ccacacatc ctcaaaccca atcaccctt cctctgtatg ctgtcacacc tatattatta aacttatcac attgcattgt aattacttcc tgacctttgt atctactct ttagttaactg atgtatat atctgata agattgtttc attgtgcaat caataaatgt ttgataaaat aaagccc</p>	Homo sapiens
515	160329	Proteinase- Activated Receptor 4	NM_003950	<p>LKNTLVADLI MTLMLPFKIL SDSHLPWQL RAFVCRFSSV IFYETMYVGI VLLGLIAFDR FLKIIIRPLRN IFLKRPVFAK TVSIFWFFL EFISLPNMIL SNKEATPSSV KKCASLKGPL GLKWHQMVNN ICQFIFWTFV ILMVIFYWVI AKKYVDSYRK SKSKDRKNNK KLEGKVFVVV AVFFVCFAPF HFARVPYTHS QTNNKTDCLR QNQLFIKAKET TLFLAATNIC MDPLIYIFLC KKFTEKLPCM QGRKTTASSQ ENHSSQTDNI TLG</p>	Homo sapiens

cctctatggg ctggtcctgg tggtaggggt gccggccaat gggctgggc tgtgggtgct
ggccacgcag gcacctggc tgcctccac catgtgtg atgaacctg cgaactgctga
cctctgtg gccctgggc tgcctccgc gatcgctac cactgctg gceagcgtg
ggccttggg gaggcgcct gccgcctgg cagcgctgc ctctatgtc acatgtatg
ctcagtgtg ctgctggccg ccgtcagcct gcatcgctac ctggccctg tgcacctgct
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gtgtacggg gccacctgc acagctgg gccagcgg cggcgctacg gccacgcgt
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tggcggcga gccagagatg ggagtatgc ggacggacac aaactaagg atgccacgat
gccaagaca gccaacagcc accagagcc aggaacagg cctgggacgg gctctccctc
acagcctcca gaggaacca gccctggccac cacttgacc ctggacttct ggcctgcaga
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cagccaggga atctgaaca ggataaact ctgcttctg ggccctgcca gcactctg
ctcggcttc tggctggat gcagccacg acgactggt gtctgagatg gggctggagc

516	160329	Proteinase- Activated Receptor 4	NP_003941.1	<p> tgggggtggg gctgcattcc ctggagactc actgcaagtt cctgccagg aggtgaggg caccccatcc tcaagtccca atgctgtggc ccacacagg ccagagcctg gttggccatt ctcatgccca ccagcttctg gcttgggat gtctcttgag caaccagaat agcaccacca actctgtccc ccaaaaccca tcaatagcac ggctcagcct cctgctatcc cctgactgct ggggaccctc gccttcctcc ctctcactg caggtcgtgc ctctcttcca ctctctgtca atgtcacca gataaggtg ggacaatggg gggggggggg ggacagtgtg tgcggggggg ttcgggtgct gcagacctgg aactcccttc tgcaggatg ttggcagccg gtttaagcc ttgcacggga cagaccacac ccacgcgaac ctcatccctc cagcactaac cacatccact ctcaacccc tccccttgc actgaccaca ccacccctc tgggccccgc ccccgccact gaacatccc gccctcaacc ccgaccctc cgcactacc tccccctgc cgtcgacccc ggccctcacc aactgacca cctcaaccc attgcccga tccccacca cagtgaccac acctcactg gctcggccct gccccagta tactgacct tccccagcca ctcccttcc gcaattacca ctccccagc cagccctcc cccgtgacc gtctctccag ccccgctccc ccgtacagg cagagcgccc gccacactct atgctgcgtt ctctgactt tacgttggcc ctctctgc caagcccca ggggagccct cctggcgtc caggggtggg agtcgggggtg tggcagggcg cgggtggggg cggcagtggc tccgcgact caccgggccc cgggcaggg gcgcgtcca ctctgttga cgcgggtccg gcgcacagt cccgggcgag tgggctgtgc gtgctgact ttagaagcg agtgccctc aggtacagc gacgaggggtg gcgggtgacc aagtcaagg gcgacgggtc agggaccggg ccgggcccgg ggtcggggcg cgcggcccta ccgggttcgt agtagtcga cccggagact ggcagcgcc acgtcctgcc caccacgcac tcccggag cccggaacc cagcagctc aggcacggc tggggatctg tggggcagcg gcgggcag gctcgaccg gcccagagg cccggggcgc tgagctcagg cccagaactg gctgatttca gggatacca ggacgggtga aacacagaag aaactgtatc ccatcttctt ttttctttt actttcttt tttttttt ttctgagac agagtctgc gctgttgc aggtggagt gcagtggcgt gatctggct cactgcaagc tcggctcct ggttcaaat gattctctg cctcagctc ccaagtagct gggataacag gcgccacca ccgaccctg ctaattttt gtattttga tcaagacgga gtttccact gttggccagg ctggtctcca actcctccc tcaagtatc cgcctgggtc ccatcttcta ttcttgggt ccttccatcc cactgggaaa acgtctcagg tggcctctga aacaccactc ctitttgtgt gttgcacgc atggctgagc atgtgtgggt gggagtcagc acattcacga tactgtgcaa tcatcacctc tgtctagta caggacggtt tcttctccc ccaagaaaac cccatcgcca tcagactca ctccccact cccagcccc tggcaaccac aaatcttcc aactctacgg atttgctgt tctgggcatt tcatgtcaat ggaatcatgt actctgtga aaaaaaaa aaaaaaaa aaaaaaaaa aaaaaaaa aaaaaaaa aaaa MWGRLLWPL VIGFSLSGT QTPSVYDESG STGGGDDSTP SILPARGYP GQVCANDSDT P LELPDSSRAL LGWVPTPLV FALYGLVLV GLPANGIALW VLATQAPRLP STMLMNLAT ADLLALALP PRIAYHLRGQ RWPFGENACR LATAALYGHM YGSVLLAAV SLDRIYALVH PLRARALRGR RLALGLCAA WLMAALALP LTLQRTFRL ARSDRVLCND ALPLDAQASH WQPAFTCLAL LGCFLPLAM LCYGTALHT LAASGRYGH ALRLTAVWLA SAVAFFVPSN LLLLHYSDP SPSAWNLYG AYVPSLALST LNSCVDPIY YVSAEFRDK VRAGLFQRP GDTVASKASA EGSRGNGTH SSLIQ </p>	Homo sapiens
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517	160330 G Protein-Coupled-Receptor TM7XN1/GPR56	NM_005682	cggcagcagg gctcgcctct gtccacacagg ctggagtgca gtggtgtgat cttggtctcat A cgtaacctcc acctccggg ttcaagtgtat tctcagcct cagctcccc agtagctggg sapiens attacaggtg gtgacttcca agagtactc cgtcggagga aaatgactcc ccagtcgctg ctgcagacga cactgttctc gctgagtctg ctcttccctg tccaaggtgc ccagggcagg ggccacagg aagactttcg ctctgcagc cagcggaaac agacacacag gageagcctc cactacaac ccacacaga cctgcgcatc tccatcgaga actccgaaga ggcctcaca gtccatggcc ctctccctgc agccaccct gcttccgat ccttccctga cccagggggc ctctaccact tctgcctcta ctggaaccga catgtctggga gattacatct tctctatggc aagcgtgact tcttctgtgag tgacaaagcc tctagcctcc tctgttcca gcaccaggag gagagcctgg ctccagggccc cccgctgtta gccattctg tcaactctg gtggagccct cagaacatca gccgcccag tgcgcgcagc ttacattct ccttccacag tcttccccac acggcgcctc aaatgctc ggtggacatg tgcgagctca aaaggaccc cagctgtctc agccagttcc tgaagcatcc ccagaaggcc tcaaggaggc cctcggctgc ccccgccagc cagcagttgc agagcctgga gtcgaaactg acctctgtga gattcatggg ggacatggtg tcttccagg aggaccggat caagccacg gtatggaagc tccagccccc agcggcctc caggacctgc acatccactc ccggcaggag gagagcaga gcgagatcat ggagtactcg gtgctgctgc ctcgaaactc ctctccagg acgaaaggcc ggagcgggga ggctgagaa agactcctcc tgggtgactt cagcagccaa gccctgttcc aggaacagaa ttccagccaa gtcctgggtg agaaggtctt ggggattgtg gtacagaaca ccaaagtagc caacctcagc gagccctgg tgctcaactt ccagcaccag ctacagccga agaattgtac tctgcaatgt gtgtctggg ttgaagacc caccattgag agccggggc attggagcag tgctgggtgt gagaccgtca ggagagaac ccaaacatcc tgttcttga accacttgac ctactttgca gtgctgatgg tctcctcgtt ggaggtggac gccgtgcaca agcactacct gagctcctc tctacagttg gctgtgtcgt ctctgcctg gccgtccttg tcaccattgc cgcctacctc tgctccaggg tgccctgccc gtgcaggagg aaacctcggg actacacct caaggtgcac atgaacctgc tgctggcctt ctctcgtctg gacacgagct tctgtctcag cgagccgggtg gccctgacag gctctgaggc tggctgccga gccagtgcga tcttcttga ctttccctg ctcaccctgc ttctctggat gggcctcgag gggtaacacc tctaccgact cgtggtggag gtctttggca cctatgtccc tggctacctc ctcaagctga gcgcatagg ctggggcttc cccatcttc tggtagcgt ggtggcctg gtgagtgtg acaactatg ccccatcctc ttggctgtgc ataggactcc agagggcgtc atctacccct ccatgtgctg gatccgggac tccctggta gctacatcac caacctgggc ctcttcagcc tgggttttct gtccaacatg gccatgctag ccaccatggt ggtgcagatc ctggcggtgc gcccccacac ccaaaagtgg tcacatgtgc tgacactgt gggcctcagc ctggtccttg gccctgccc ggccttgatc ttcttctct ttgttcttg caccctccag ctgtgtcgtc tctacctttt cagcatcctc acctcctcc aaggttctct catcttcac ttgtactggt ccatggcgtt gcaggcccg ggtggccctt cccctctgaa gageaactca gactgcgcca ggtccccc cagctcgggc agcactcgt ccagccgcat ctaggcctcc agccacctg ccatgtgat gaagacaga tgcgctcgt tcgcacactg cctgtggccc ccgagccagg cccagcccca ggcagtcag ccgcagact ttggaagccc aacgacctg gagagatgg ccgttgccat ggtgacgga ctcccgggc tggggctttt gaattggcct tggggactac tgggtctca ctacgtccc	Homo sapiens
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518	160330	G Protein- Coupled- Receptor TM7XN1/GPR56	NP_005673.1	<p>acgggactca gaagtgcgcc gccatgctgc ctagggtact gtccccacat ctgtcccaac ccagctggag gcctgtgtctc tccttacaac ccctggggccc agcctcattg ctggggggcca ggccttgat cttgagggtc tggcacatcc ttaatcctgt gccctgcct gggacagaaa tgtggctcca gttgtctgt ctctgtggt caccctgag gacatctgca tcctctgtca ttttaacctc agtggtcacc caggcgcaat ggggccagg gcagacctc agggccagag ccctggcgga ggagaggccc ttgcccagga gcacagcagc agctgccta cctctgagcc cg</p>	Homo sapiens
519	160387	Glucagon- Like Peptide 2 Receptor	NM_004246	<p>MTPQSLIQT LFLLSLFLV QGAHGRHRE DFRFSQRNQ THRSIIHYKP TPDLRISIEN P SEELTVHAP FPAAHFASRS FPDPRGLYHF CLYWMRHAGR LHLLYKGRDF LLSDKASSLL CFQHQEESLA QGPPLATSV TSWSPQNIS LPSAASFTFS FHSPPHTAAH NASVDMCELK RDLQLLSQFL KHPQKASRRP SAAPASQQLQ SLESKLTSVR FMGDMVSFEE DRINATWKL QPTAGLQDLH IHSRQEEQS EIMEYSVLLP RTLFQRTKGR SGEAEKRLLL VDFSQALFQ DNSSQVIGE KVLGIVVQNT KVANLTPVV LTFQHQLOPK NVTLOQVFW EDPTLSSPGH WSSAGCETVR RETQTSFCFN HLTYFAVLMV SSVEVDVAVHK HYLSSLSYVG CWSALACLIV TIAAYLCSR PLPCRKRPRD YTIKVHNNLL LAVFLDTSF LLEPVALTG SEAGRASAI FLHFSLLTCL SWMGLEGYNL YRLVVEVFGT YVPGYLLKLS AMGWGPPIFL VTLVALVDVD NYGPIILAVH RTEGVITYPS MCWIRDSLVS YITNLGLFSL VFLENNAMLA TMVQILRLR PHTQKWSHVL TLLGLSLVLG LPWALIFFSF ASGTFQLVVL YLFSITTSFQ GLFIIFYWS MRLQARGGPS PLKNSNDCAR LPISSGSTSS SRI</p>	Homo sapiens
519	160387	Glucagon- Like Peptide 2 Receptor	NM_004246	<p>atgaagtgg gatcgagcag ggcaggccct gggagaggaa gcgcgggact cctgcctggc A gtccacagc tgcctatgg cctcctgcc cctcctggga ccagctcctc cctctccac aggaaagtct cctctgggc cctcctggag' cctctcctca cctgtgtcct gctgtttcc atcaagcaag ttacaggatc cctccttgag gaaacgactc ggaagtgggc tcagtacaaa caggcatgtc tgagagactt actcaaggaa cctctcggca tatttgtaa cgggacattt gatcagtacg tgtgtggcc tcattctct cctggaatg tctctgtacc ctgccctca tacttacctt ggtggagtga agagagctca ggaaggcct acagacactg cttggctcag gggacttggc agacgataga gaacgcacg gatattggc aggatgactc cgaatgctcc gagaaccaca gcttcaagca aaacgtggac cgttatgcct tgcgtcaac cttgcagctg atgtacacg tgggatactc cttctcctt atctcctct cctgtgctct caccctcctc ttgtttctc gaaaactcca ctgcacgcg aactacatcc acatgaactt gttgtctct ttcatcctga gaacctggc tglactgggt aaggacgtcg tctctacaa cctctactcc aagaggcctg acaatgagaa tgggtggatg tctactctgt cagagatgc caccctcctg cgctcagtc aggttctctt gcattactt gtgggtggca attactatg gctgtggtt gaaggcctct acctecacac gctgtggag cccaagtcg tctctgagag gcggtgtgg ccagatacc tgcgttggg ttgggccttc cctgtgctat ttgtgtacc ctgggtttc gcccgtcac acctgagaa cacagggtgc tggacaacaa atgggaataa gaaaatctg tggateatcc gaggacccat gatgctctgt gtaacagtc atttctcat ctctctgaaa attctcaagc ttctcattc taagctcaa gctcatcaa tgtgcttcag agattataa tacagattgg caaatcaac actggtcctc attccttat tgggcttca tgagatcctc ttctcttca tcaatgatga tcaagttaa ggatttgcaa aactatagc acttttcat cagttgacac tgagctcctt tcaatgggtc ctggtggcct tgcagtatgg ttttgccaat</p>	Homo sapiens

520	160387	Glucagon- Like Peptide 2 Receptor	NP_004237.1	<p>ggaagaagtga aggtgagct gcggaataac tgggtccgct tctgtctagc ccgccactca</p> <p>ggctgcagag cctgtgtcct ggggaaggac ttccggttcc taggaaatg tcccaagaag</p> <p>ctctcgaa gtagtggtgc tgagaagctt cggaaagctt agccctcact taacagtggg</p> <p>cggtcctac atctagccat gcgaggtctt ggggagcttg gcgccagcc caacaggac</p> <p>catgcagct ggcgccggg cagcagcctg tccgagtga gtgagggga tgtcaccatg</p> <p>gccaacacca tggagagat tctggaag agtgagatct ag</p> <p>IKQVTSRAGP GRGSAGLLPG VHELPGIPA PWGTSPLSFH RKCSLWAPGR PFTIVLLVS P</p> <p>IKQVTSLLLE ETTRWAQYK QACLRLIKE PSIFGNGTF DQYVCWPHSS PGNVSVPCPS</p> <p>YLPWSEESS GRAYRHCLAQ GTWQTIENAT DIWDDSECS ENHSFKQNV DRYALLSTLQL</p> <p>MYTVGYSFSL ISLFLALTLL LFLRLHCTR NYIHNMLEAS FILRTIAVIV KDVVFNYSYS</p> <p>KRPDNGNWM SYLSEMSSTSC RSQVLLHYF VGANYIMLLV EGLYHTLLE PTVLPERRLW</p> <p>PRYLLGWAF PVLVFPWGF ARAHLENTGC WTTNGNKKIW WIIRGPMMLC VTNFFIFLK</p> <p>ILKLLSKLK AHQCFRDYK YRLAKSTLVL IPLLGVHEIL FSFITDDQVE GFALIRLFI</p> <p>QLTLSSFHGF LVALQYGFAN GEVKAEIRKY WREFLLARHS GCRACVLGKD FRFLGKCPKK</p> <p>ISEGDGAELK RLQPSLNSG RLLHLAMRGL GELGAQPQQD HARWPRGSSL SECSEGDVTM</p> <p>ANTMEEILEE SEI</p>	Homo sapiens
521	160388	Latrophilin- 1	NM_014921	<p>tttttttttt ttttttctt aatttttgggt cggcgggcgt gctgggccag gggaaggaaag A</p> <p>ggacacggag gccgcctctg tcccgccacc tctaccgcgc ttccccccag ccccggtccc</p> <p>gggagatgtg ccggcggggg ggccggggtt cgcgcagcgc caggagagac acgtgggcc</p> <p>gacccagag aggcgttga caggctgttg gtccaggcgc tgggtccctgc caggtgatgt</p> <p>ggggcaagc ccccgccaca ggccactgag agtccggac acgcaccgcg ctgccaccat</p> <p>ggccgccta gccgcagtgc tctggaatct gtgtgtcacc gccgtccctgg tcaectggc</p> <p>caccgaagc ctgagccggg ccgggctccc gtccggctgc atgcgccggg agctggcgtg</p> <p>tgaaggctac cccatcgagc tgcggtgccc cggcagcgac gtcatcatgg tggagaatgc</p> <p>caactacggg cgcacggagc acaagatttg cgaatgctgac ctttccaga tggagaatgt</p> <p>gcagtgtac ctgccggagc ccttcaagat catgtcacag aggtgaaca accgcacca</p> <p>gtcgtgtgtg gtcgcgggt cggatgcctt tctgacccc tgctctgga cctacaagta</p> <p>cctggagggtg cagtacgact gtgtcccta caaagtggag cagaaagtct tctgtgccc</p> <p>agggaacctg cagaagtgc tggagccac ctcgacacac gactcagagc accagtctgg</p> <p>cgatgtgc aaggaccgc tgcaggcgg tgcgcgcatc tacgtgatgc cctggatccc</p> <p>ctaccgcag gacacactga ctgagtatgc ctctgggag gactacgttg ccgccgccca</p> <p>caccaccac taccgctgc ccaaccgct ggatggcaca ggcttggg tctacgatgg</p> <p>tgcgtcttc tacaacaagg agcgacgcg caacatcgtc aagtatgacc tacggacgcg</p> <p>catcaagagc ggggagacgc tcatcaatac cgcacaactac catgacacct cgcctaccc</p> <p>ctggggcgga aagaccgaca ttgacctggc ggtggacgag aacgggctgt gggcatcta</p> <p>cgccactgag ggcaacaac ggcggctggt ggtgagccag ctgaacccct acactgcg</p> <p>ctttgagggc acgtgggaga cgggttacga caagcgtcg gcatccaacg cttcatggt</p> <p>gtgtggggtc ctgtacgtcc tgcgtccgt gtactggat gatcacagc agggcgtgg</p> <p>caaccgcgtg gactatgcct tcaacaccaa tgccaaccgc gaggagcctg tcagcctcac</p> <p>cttcccaac cctaccagt tcatctctc cgttgactac aacctcgc aacaccgct</p> <p>gtactgtctg aacaactatt tctgtgtgctg ctacagcctg gacttgggc ccgccgccc</p>	Homo sapiens

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Homo
sapiens

522 160388 Latrophilin- NP_055736.1 MARLAALWN LCVTAVLWTS ATQGLSRAGL PFGLMRRELA CEGYPIELRC PGSDVIMVEN P
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SEQ ID NO:	LSID	Gene	Source ID	LPID	Peptide	SpeciesName
692	127	5-HT1A Receptor	P08908	595	CAPASFERKNERNAEAKRKM	Homo sapiens
693	127	5-HT1A Receptor	P08908	608	GRIFRAARFRIKTVKKVE	Homo sapiens
694	127	5-HT1A Receptor	P08908	610	RTPEDRSDPDACTISK	Homo sapiens
695	127	5-HT1A Receptor	P08908	612	RHGASAPQPKSVNGE	Homo sapiens
696	128	5-HT1B Receptor	P28222	585	KQTPNRTGKRLTRAGLIID	Homo sapiens
697	128	5-HT1B Receptor	P28222	586	SPGSTSVTSINSRVDP	Homo sapiens
698	128	5-HT1B Receptor	P28222	598	KVRVSDALLEKKKLMA	Homo sapiens
699	128	5-HT1B Receptor	P28222	599	ANLSSAPSGNCSAKD	Homo sapiens
700	129	5-HT1D Receptor	P28221	577	IKLADSALERKRISAA	Homo sapiens
701	129	5-HT1D Receptor	P28221	588	GEASNPSLNATETSEA	Homo sapiens
702	129	5-HT1D Receptor	P28221	589	RIYRAARNRILNPPSL	Homo sapiens
703	129	5-HT1D Receptor	P28221	590	KAQEMSDCLVNISQIS	Homo sapiens
704	130	5-HT1E Receptor	P28566	815	RHLSNRSTDQNSFASC	Homo sapiens
705	130	5-HT1E Receptor	P28566	817	CITEASMAIRPKTITEKM	Homo sapiens
706	130	5-HT1E Receptor	P28566	818	DNDLDHPGERQQISST	Homo sapiens
707	130	5-HT1E Receptor	P28566	2738	CVSDFSTDPTEFEK	Homo sapiens
708	130	5-HT1E Receptor	P28566	2739	RIYHAAKSLYQKRGSSR	Homo sapiens
709	131	5-HT1F Receptor	P30939	604	ESGEKTSKSVSTSYWL	Homo sapiens
710	131	5-HT1F Receptor	P30939	606	DKCKISEEMSNFLAWLG	Homo sapiens
711	131	5-HT1F Receptor	P30939	864	IAKEEVNGQVLLSEGE	Homo sapiens
712	131	5-HT1F Receptor	P30939	869	STVRSURSEFKHEKSWR	Homo sapiens
713	132	5-HT2A Receptor	CAA01675.1	1106	DAFNWTVDSNRLNSC	Homo sapiens
714	132	5-HT2A Receptor	CAA01675.1	1107	FGLQDDSKVKEGSC	Homo sapiens
715	132	5-HT2A Receptor	CAA01675.1	1108	PGSVTGRRTMQSISNEQKAC	Homo sapiens
716	132	5-HT2A Receptor	CAA01675.1	1109	CSMVVALGKGHSEEAASKDNSD	Homo sapiens
717	132	5-HT2A Receptor	CAA01675.1	1110	NTTPALAYKSSQLQM/GQ	Homo sapiens
718	133	5-HT2B Receptor	P41595	1111	KGIETDVDPNNITC	Homo sapiens
719	133	5-HT2B Receptor	P41595	1112	CSSPEKVAMILDGSRKDKA	Homo sapiens
720	133	5-HT2B Receptor	P41595	1113	RRTSTIGKKSVMQTSINE	Homo sapiens
721	133	5-HT2B Receptor	P41595	1114	CNYRATKSVKTLKRSSK	Homo sapiens
722	133	5-HT2B Receptor	P41595	1187	SGLQTESIPEEMKQIVVEEGG	Homo sapiens
723	134	5-HT2C Receptor	P28335	1115	CKRNTAEENSANPNQDQNA	Homo sapiens
724	134	5-HT2C Receptor	P28335	1116	GHTTEPPGLSLDLFLKC	Homo sapiens
725	134	5-HT2C Receptor	P28335	1117	CNYKVEKKPPVRQIPRV	Homo sapiens
726	134	5-HT2C Receptor	P28335	1118	IGLRDEEKVFNNTTC	Homo sapiens

727	134	5-HT2C Receptor	P28335	1119	RHTNEPVIEKASDNEP	Homo sapiens
728	134	5-HT2C Receptor	NP_000859.1	1826	RNAVHSLVHLGLLVWQCD	Homo sapiens
729	134	5-HT2C Receptor	NP_000859.1	1829	CDISVPAAIVTDIFNTSD	Homo sapiens
730	134	5-HT2C Receptor	NP_000859.1	1830	DGGRFKPDGVQNWPAIS	Homo sapiens
731	136	5-HT4 Receptor	CAA73107.1	654	NNIGIDLEKRFNQ	Homo sapiens
732	136	5-HT4 Receptor	CAA73107.1	655	ESRPSAQDQSTHRMR	Homo sapiens
733	136	5-HT4 Receptor	CAA73107.1	656	CDDERYRPSILGQIVP	Homo sapiens
734	136	5-HT4 Receptor	CAA73107.1	657	RDAVECGGWESQCHPPATS	Homo sapiens
735	136	5-HT4 Receptor	CAA73107.1	2682	VIAKEHAHQIMLQIRAGASSESRP	Homo sapiens
736	136	5-HT4 Receptor	CAA73107.1	2683	KSFRRAFIULCCDDE	Homo sapiens
737	136	5-HT4 Receptor	CAA73107.1	2684	VIAKEHAHQIMLQIRAGA	Homo sapiens
738	136	5-HT4 Receptor	CAA73107.1	2685	KEHAHQIMLQIRAGA	Homo sapiens
739	136	5-HT4 Receptor	CAA73107.1	2686	VIAKEHAHQIMLQIR	Homo sapiens
740	138	5-HT6 Receptor	P50406	649	RTPRPGVESADSRRLATK	Homo sapiens
741	138	5-HT6 Receptor	P50406	650	CPREGRASLASPSLRTS	Homo sapiens
742	138	5-HT6 Receptor	P50406	652	PLFMDFKRALGRFLPC	Homo sapiens
743	138	5-HT6 Receptor	P50406	653	RAAAAVNFNIDPAEPE	Homo sapiens
744	139	5-HT7 Receptor	P34969	658	EVTASPTWDAPPDNASGC	Homo sapiens
745	139	5-HT7 Receptor	P34969	659	KAARSAAKHKPPGFPRVE	Homo sapiens
746	139	5-HT7 Receptor	P34969	660	CANLSRLKHERKNISIFKR	Homo sapiens
747	139	5-HT7 Receptor	P34969	663	KLAERPERPEFVIRAC	Homo sapiens
748	272	Adenosine A1 Receptor	AAA17544.1	8	CHKPSILTYIAFLT	Homo sapiens
749	272	Adenosine A1 Receptor	AAA17544.1	9	NGSMGEPVVKCEFEKVIME	Homo sapiens
750	272	Adenosine A1 Receptor	AAA17544.1	10	NKKVSASSGDPQKYVGKELK	Homo sapiens
751	272	Adenosine A1 Receptor	AAA17544.1	11	NDFRCQGPAPPIDEDLPEER	Homo sapiens
752	272	Adenosine A1 Receptor	P25099	286	CQPKPIDEDLPEEKAE	Rattus norvegicus
753	272	Adenosine A1 Receptor	P25099	302	QPKPIDEDLPEEKAE	Rattus norvegicus
754	272	Adenosine A1 Receptor	AAA17544.1	303	MPPSISAFQAAVIGIEVLI	Homo sapiens
755	273	Adenosine A2a Receptor	P29274	1237	QGNTGLPDVELLSHELKGV	Homo sapiens
756	273	Adenosine A2a Receptor	P29274	1238	MPIMGSSVITVELAIA	Homo sapiens
757	273	Adenosine A2a Receptor	P29274	1239	RSHVLRQQEPFKAAGT	Homo sapiens
758	273	Adenosine A2a Receptor	P11617	1240	RIRERQTRFKIRSH	Canis familiaris
759	274	Adenosine A2b Receptor	P29275	676	KDSATNNCTEPWDGTTNES	Homo sapiens
760	274	Adenosine A2b Receptor	P29275	677	CRQLQRTLMIDHSRTLQRE	Homo sapiens
761	274	Adenosine A2b Receptor	P29275	678	RNRDRYTFHKISRYLLC	Homo sapiens
762	274	Adenosine A2b Receptor	P29275	679	CQADVKSGNGQAGVQP	Homo sapiens

763	274	Adenosine A2b Receptor	P29275	680	CVTLFQPAQGNKPKW	Homo sapiens
764	274	Adenosine A2b Receptor	P29275	2714	MILETQDALVVAELVIAAL	Homo sapiens
765	275	Adenosine A3 Receptor	P33765	683	IFYIRNKLSLNSKE	Homo sapiens
766	275	Adenosine A3 Receptor	P33765	686	NMKLTSEYHRNVTLSC	Homo sapiens
767	275	Adenosine A3 Receptor	P33765	687	AYKIKKFETYLLKAC	Homo sapiens
768	275	Adenosine A3 Receptor	P33765	689	TGAFYGREFTAKSLF	Homo sapiens
769	275	Adenosine A3 Receptor	P33765	2296	KRVTHRRWLALGLC	Homo sapiens
770	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	4	CPRVVLPEEIFFTIS	Homo sapiens
771	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	5	MGYLKPRGSFETADDIIDS	Homo sapiens
772	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	6	RYHSIVIMRRTVAVLT	Homo sapiens
773	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	7	AFRSPELRDFAKMFIC	Homo sapiens
774	376	Alpha 1d-adrenoreceptor	AAA35496.1	12	RSTRISLEAGVKRERKASE	Homo sapiens
775	376	Alpha 1d-adrenoreceptor	AAA35496.1	13	KEPVPPDERFCGITEEAG	Homo sapiens
776	376	Alpha 1d-adrenoreceptor	AAA35496.1	14	RSTEMVQRLRMEAVQ	Homo sapiens
777	376	Alpha 1d-adrenoreceptor	AAA35496.1	15	PRPSCAPKSPACRTIRSP	Homo sapiens
778	377	Alpha 1b-adrenoreceptor	P35368	696	KEMSNKELTURIHSK	Homo sapiens
779	377	Alpha 1b-adrenoreceptor	P35368	697	GGSLERSQSRKDSLDDSGSC	Homo sapiens
780	377	Alpha 1b-adrenoreceptor	P35368	698	APEPPGRRGRHDSGGL	Homo sapiens
781	377	Alpha 1b-adrenoreceptor	P35368	699	KLLTEPSPGTDGGASNGGC	Homo sapiens
782	379	Alpha 1c-adrenoreceptor	AAA93114.1	1245	GSGMASAKTKHFSVR	Homo sapiens
783	379	Alpha 1c-adrenoreceptor	AAA93114.1	1246	RIPVGSRETFYRISKTDGVC	Homo sapiens
784	379	Alpha 1c-adrenoreceptor	AAA93114.1	1247	SSMPRGSARITYSKDQSSC	Homo sapiens
785	379	Alpha 1c-adrenoreceptor	AAA93114.1	1248	ESRGLKSGLKTDKSDS	Homo sapiens
786	387	Alpha 2a-adrenoreceptor	P08913	1343	ERRPNGGLGPERASGPG	Homo sapiens
787	387	Alpha 2a-adrenoreceptor	P08913	1344	PGEPAPAGPRDTDALD	Homo sapiens
788	387	Alpha 2a-adrenoreceptor	P08913	1345	RGPRGKGKARASQVKPGD	Homo sapiens
789	387	Alpha 2a-adrenoreceptor	P08913	1346	RGPAGTIGITPAAGPGEE	Homo sapiens
790	387	Alpha 2a-adrenoreceptor	P08913	1347	RVGAAKASRWGRQNIIE	Homo sapiens
791	388	Alpha 2b-adrenoreceptor	P18089	1348	IYKGDQGPQPRGRPQC	Homo sapiens

792	388	Alpha 2b-adrenoceptor	P18089	1349	RSNRRGPRAKGGPGQGE	Homo sapiens
793	388	Alpha 2b-adrenoceptor	P18089	1350	ASAREVNGHSKSTGEK	Homo sapiens
794	388	Alpha 2b-adrenoceptor	P18089	1351	RGVGAIGGQWRRRAH	Homo sapiens
795	389	Alpha 2c-adrenoceptor	P18825	1352	RAPVGPDGASPTENG	Homo sapiens
796	389	Alpha 2c-adrenoceptor	P18825	1353	RTGTARPPPTWSRTR	Homo sapiens
797	389	Alpha 2c-adrenoceptor	P18825	1354	ASRSPGPGGRLSRASS	Homo sapiens
798	389	Alpha 2c-adrenoceptor	P18825	1355	RSVEFLSRRRARRSSVC	Homo sapiens
799	599	Bradykinin B1 Receptor	P46663	798	PMASGRQRRRQARVTC	Homo sapiens
800	599	Bradykinin B1 Receptor	P46663	799	NYHILASLRTRREEVSR	Homo sapiens
801	599	Bradykinin B1 Receptor	P46663	800	RVRGPKDSKTALILT	Homo sapiens
802	599	Bradykinin B1 Receptor	P46663	801	VGRLFRTKVWELYKQC	Homo sapiens
803	600	Bradykinin B2 Receptor	AA802793.1	794	FRIMKEYSDEGHNVTAC	Homo sapiens
804	600	Bradykinin B2 Receptor	AA802793.1	795	CTIMQIMQVLRNEMQKKE	Homo sapiens
805	600	Bradykinin B2 Receptor	AA802793.1	796	CQDERIDVTQIASFM	Homo sapiens
806	600	Bradykinin B2 Receptor	AA802793.1	797	CRSEPIQMENSMTLRTS	Homo sapiens
807	635	Beta-1 adrenoceptor	AAA51667.1	1357	RVFREAQKQVKIDSC	Homo sapiens
808	635	Beta-1 adrenoceptor	AAA51667.1	1358	CERFLGGPARPPSPS	Homo sapiens
809	635	Beta-1 adrenoceptor	AAA51667.1	1359	ANGRAGKRPRSLVALRE	Homo sapiens
810	635	Beta-1 adrenoceptor	AAA51667.1	1360	CARRAARRRHATHGDRPRAS	Homo sapiens
811	635	Beta-1 adrenoceptor	AAA51667.1	1361	CLARPGPPSPGAAASD	Homo sapiens
812	635	Beta-1 adrenoceptor	AAA51667.1	1362	CNGGAAADSDSSLDEP	Homo sapiens
813	640	Beta-2 adrenoceptor	NP_000015.1	2654	KRQLQKIDKSEGRHV	Homo sapiens
814	640	Beta-2 adrenoceptor	NP_000015.1	2656	GEQSGYHVEGEKENKLLC	Homo sapiens
815	640	Beta-2 adrenoceptor	NP_000015.1	2662	APNIRSHAPDHDTVQQR	Homo sapiens
816	640	Beta-2 adrenoceptor	NP_000015.1	2663	VPLVMVFVYSRVFQE	Homo sapiens
817	643	Beta-3 adrenoceptor	P13945	1390	RGELGRFPPEESPAP	Homo sapiens
818	643	Beta-3 adrenoceptor	P13945	1391	SRLAPAPVGTCAPE	Homo sapiens
819	643	Beta-3 adrenoceptor	P13945	1392	GVPAACGRRPARLLPRE	Homo sapiens
820	643	Beta-3 adrenoceptor	P13945	1393	PSGVPAAARSSPAQPRLC	Homo sapiens
821	688	Opsin, blue-sensitive	NP_001699.1	1753	EEEFYLFKNISSVGPWDGPQ	Homo sapiens
822	688	Opsin, blue-sensitive	NP_001699.1	1754	CGPDWYTVGTYRSESYT	Homo sapiens
823	688	Opsin, blue-sensitive	NP_001699.1	1755	NNRINHGLDLRLTIPS	Homo sapiens
824	688	Opsin, blue-sensitive	NP_001699.1	1756	IMKMVCGKAMTDESDT	Homo sapiens
825	692	Bombesin Receptor	AAA35604.1	20	SITNDTESSSVV'SNDNTNK	Homo sapiens
826	692	Subtype-3 Bombesin Receptor Subtype-3	AAA35604.1	21	KAVVKPLERQPSNAILKTC	Homo sapiens

827	692	Bombesin Receptor Subtype-3	AAA35604.1	22	RDPNKNMTFESCTSPVSKK	Homo sapiens
828	692	Bombesin Receptor Subtype-3	AAA35604.1	23	RTLYKSTLNIPTEEQSHARK	Homo sapiens
829	692	Bombesin Receptor Subtype-3	AAA35604.1	24	KSFQKHFKAGLFCCKAERPE	Homo sapiens
830	692	Bombesin Receptor Subtype-3	NP_001718.1	2286	NKGWSGDNSPGIEALC	Homo sapiens
831	692	Bombesin Receptor Subtype-3	NP_001718.1	2287	QRQPHSPNQTLISITNDTE	Homo sapiens
832	692	Bombesin Receptor Subtype-3	NP_001718.1	2288	RPEPPVADISLTILAV	Homo sapiens
833	692	Bombesin Receptor Subtype-3	NP_001718.1	2289	SEISVTSFTGCSVKQAE DR	Homo sapiens
834	729	CXC Chemokine Receptor 5	P32302	1382	ELDRLDNVDNLSLVENHLC	Homo sapiens
835	729	CXC Chemokine Receptor 5	P32302	1383	SQGHNNINSLPRCTFSQE	Homo sapiens
836	729	CXC Chemokine Receptor 5	P32302	1384	CWGVVHRLRGAQR RP	Homo sapiens
837	729	CXC Chemokine Receptor 5	P32302	1385	CQLFPSWRSSSENA	Homo sapiens
838	735	C-C Chemokine Receptor 1	P32246	305	TEDYDITTEFDYGDATPC	Homo sapiens
839	735	C-C Chemokine Receptor 1	P32246	1242	ASMPGLYFSKITQWEFTHTC	Homo sapiens
840	735	C-C Chemokine Receptor 1	P32246	1243	CSLHFPHESLREWKLFQA	Homo sapiens
841	735	C-C Chemokine Receptor 1	P32246	1244	TILSVFQDFLTHEC	Homo sapiens
842	737	C-C Chemokine Receptor 3	P51677	1386	CSALYPEDTVWSWRHF	Homo sapiens
843	737	C-C Chemokine Receptor 3	P51677	1387	PEFIFYETEELFEETLC	Homo sapiens
844	737	C-C Chemokine Receptor 3	P51677	1388	SSYQSILFGNDCERSK	Homo sapiens
845	737	C-C Chemokine Receptor 3	P51677	1389	GRYPFLPSEKLERIS	Homo sapiens
846	737	C-C Chemokine Receptor 3	P51677	1751	DDVGLLCEKADTRALMAQFV	Homo sapiens
847	738	C-C Chemokine Receptor 4	P51680	306	MNATEVTDITQDET VNSY	Mus musculus
848	738	C-C Chemokine Receptor 4	P51679	348	DESISNYLYESIPKPC	Homo sapiens
849	738	C-C Chemokine Receptor 4	P51679	351	DTPSSSVTQSTM DHDLDH	Homo sapiens
850	738	C-C Chemokine Receptor 4	P51679	353	LETILVEVLQDCTFE	Homo sapiens
851	738	C-C Chemokine Receptor 4	P51679	491	RNHYCKTKYSLNSTWK	Homo sapiens
852	741	C-C Chemokine Receptor 7	P32248	748	CQDEVTDYIGDNITVD	Homo sapiens
853	741	C-C Chemokine Receptor 7	P32248	846	PELLYSDLQRRSSEQAMRC	Homo sapiens
854	741	C-C Chemokine Receptor 7	P32248	847	QLRQWSSCRHRRSSMSVE	Homo sapiens
855	741	C-C Chemokine Receptor 7	P32248	848	GVKFRNDLFLKFDLGC	Homo sapiens
856	742	C-C Chemokine Receptor 8	P51685	359	PDIFSSPCDAELIQING	Homo sapiens

857	742	C-C Chemokine Receptor 8	P51685	360	KILHLKRCQNHNTKAIR	Homo sapiens
858	742	C-C Chemokine Receptor 8	P51685	362	SQIFNYLGRQMPRESC	Homo sapiens
859	742	C-C Chemokine Receptor 8	P51685	493	FVGEKFKHLSEIFQKSC	Homo sapiens
860	752	CXC Chemokine Receptor 3	P49682	1371	ENFSSSYDYGENESDSC	Homo sapiens
861	752	CXC Chemokine Receptor 3	P49682	1372	CYAHILAVLLVSRGQRRLRA	Homo sapiens
862	752	CXC Chemokine Receptor 3	P49682	1373	MVLEVSDHQVLDNAEVAALL	Homo sapiens
863	752	CXC Chemokine Receptor 3	P49682	1374	CPNQRGLQRQPSRRD	Homo sapiens
864	753	CXC Chemokine Receptor 4	P30991	1376	TEEMGSGDYDSMKPC	Homo sapiens
865	753	CXC Chemokine Receptor 4	P30991	1377	KKLRSMIDKYRLHLSVAD	Homo sapiens
866	753	CXC Chemokine Receptor 4	P30991	1380	CIILKLSHSGHGQKRKALK	Homo sapiens
867	753	CXC Chemokine Receptor 4	P30991	1381	KILSKGRGGHSSVSTE	Homo sapiens
868	755	Complement Component 3a Receptor 1	AAC50657.1	25	ENRSLNIVQPPGEMNDRLD	Homo sapiens
869	755	Complement Component 3a Receptor 1	AAC50657.1	26	KIPSGFHEDHETSPDLSND	Homo sapiens
870	755	Complement Component 3a Receptor 1	AAC50657.1	27	RKKARQSIQIGILEAAFSEE	Homo sapiens
871	755	Complement Component 3a Receptor 1	AAC50657.1	28	PQTFQRPSADSLPRGSARLT	Homo sapiens
872	758	Complement Component 5a Receptor 1	P21730	811	DLNTPVDTKSTNLTURVPD	Homo sapiens
873	758	Complement Component 5a Receptor 1	P21730	812	CGVDYSHDKRRERAVAIVRL	Homo sapiens
874	758	Complement Component 5a Receptor 1	P21730	813	CYTHILLRTWSRRATRTSK	Homo sapiens
875	758	Complement Component 5a Receptor 1	P21730	814	QGRLRKSLPSLLRNVLTE	Homo sapiens
876	767	Calcitonin Receptor-like Receptor	Q16602	841	AELESPEDSIQLGVTR	Homo sapiens
877	767	Calcitonin Receptor-like Receptor	Q16602	843	EFVLIPWRPEGKIAEEV	Homo sapiens
878	767	Calcitonin Receptor-like Receptor	Q16602	844	RRNWNQYKIQFGNSFSNSE	Homo sapiens
879	767	Calcitonin Receptor-like Receptor	Q16602	845	RSASYTVSTSDGPGYSHDC	Homo sapiens
880	832	Cannabinoid Receptor 1	AAB18200.1	29	NDIQYEDIKGDMAKLG	Homo sapiens
881	832	Cannabinoid Receptor 1	AAB18200.1	30	KENEENIQCGENFMIDIE	Homo sapiens
882	832	Cannabinoid Receptor 1	AAB18200.1	31	EDGKVKVTRPDQARMIDIR	Homo sapiens

883	832	Cannabinoid Receptor 1	AAB18200.1	32	CEGTAGQLDNSMGDS	Homo sapiens
884	832	Cannabinoid Receptor 1	AAB18200.1	274	MKSILDGLADITFR	Homo sapiens
885	832	Cannabinoid Receptor 1	AAB18200.1	297	NKLSFKENEENIGC	Homo sapiens
886	833	Cannabinoid Receptor 2	CAA52376.1	33	KDGLDSNPMKYMILSGPQK	Homo sapiens
887	833	Cannabinoid Receptor 2	CAA52376.1	34	QDRQVPGMARMRLDVRLAKT	Homo sapiens
888	833	Cannabinoid Receptor 2	CAA52376.1	35	KEEAPRSVTETADGK	Homo sapiens
889	833	Cannabinoid Receptor 2	CAA52376.1	36	RSGEIRSSAHCHLAHWKCC	Homo sapiens
890	922	Leukocyte Antigen CD97	NP_001775.1	2644	GRDPPAKDVMGPRQELLC	Homo sapiens
891	922	Leukocyte Antigen CD97	NP_001775.1	2646	CSPGYEPVSGAKTFKN	Homo sapiens
892	922	Leukocyte Antigen CD97	NP_001775.1	2647	FSSFSEIITPTEIC	Homo sapiens
893	922	Leukocyte Antigen CD97	NP_001775.1	2648	CRPGWKPRHGINNQK	Homo sapiens
894	922	Leukocyte Antigen CD97	NP_001775.1	2649	DGEAGRDPPAKDVMGPR	Homo sapiens
895	922	Leukocyte Antigen CD97	NP_001775.1	2650	ANASNLHSHKKQAELE	Homo sapiens
896	922	Leukocyte Antigen CD97	NP_001775.1	2651	RLSAVNSIFLSHNITKE	Homo sapiens
897	922	Leukocyte Antigen CD97	NP_001775.1	2652	KLTKQFSEINPDMKKL	Homo sapiens
898	922	Leukocyte Antigen CD97	NP_001775.1	2680	KLVDLMEAPGDVEAL	Homo sapiens
899	922	Leukocyte Antigen CD97	NP_001775.1	2681	RFFDKVQDLGRDSKISS	Homo sapiens
900	941	EMR1 Hormone Receptor	Q14246	1180	RAEYLDIESKVINKEC	Homo sapiens
901	941	EMR1 Hormone Receptor	Q14246	2675	CVMHSEGHIRPTKPNITK	Homo sapiens
902	941	EMR1 Hormone Receptor	Q14246	2677	CLLNGQVREEYKRWITGKTKP	Homo sapiens
903	941	EMR1 Hormone Receptor	Q14246	2678	CLLNGQVREEYKRWITGK	Homo sapiens
904	941	EMR1 Hormone Receptor	Q14246	2679	SGHLSCQGLKASCE	Homo sapiens
905	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1183	GTALANGTGELSEHQQ	Homo sapiens
906	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1184	ADSUEVFNLHRYVD	Homo sapiens
907	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1185	VRAHRHRLRPRRQKA	Homo sapiens
908	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1186	DKLRLVIEQKTNLPALNRF	Homo sapiens
909	978	Cholecystokinin A Receptor	P32238	820	AKERKPSTSSGKYEDSDGC	Homo sapiens
910	978	Cholecystokinin A Receptor	P32238	821	CYLQKTRPPRKLELRQ	Homo sapiens
911	978	Cholecystokinin A Receptor	P32238	822	SANAWRAYDTASAERR	Homo sapiens
912	978	Cholecystokinin A Receptor	P32238	823	CPNPGPPGARGEVGEE	Homo sapiens
913	1103	Corticotropin releasing factor Receptor 2	Q13324	453	CEPILDDKQIRKYDLHYRIAL	Homo sapiens
914	1103	Corticotropin releasing factor Receptor 2	Q13324	502	QLVDHEVHESNEVWC	Homo sapiens

915	1103	factor Receptor 2	Q13324	505	DPEGPVSYCNITILDQIGTCW	Homo sapiens
916	1103	Carticotropin releasing factor Receptor 2	LR43	507	ALLEQYCHTMTLNLGS	Homo sapiens
917	1240	factor Receptor 2	CAA41734.1	41	SSHHEPRGSISKEC	Homo sapiens
918	1240	Dopamine Receptor D1	CAA41734.1	42	KAKPTSPDGNATSLAETID	Homo sapiens
919	1240	Dopamine Receptor D1	CAA41734.1	43	CSQPESFKVMSFKRE	Homo sapiens
920	1240	Dopamine Receptor D1	CAA41734.1	44	EDLKKEAAAGIARPLEK	Homo sapiens
921	1241	Dopamine Receptor D5	P21918	1407	PWEEDFWEPDVNAENC	Homo sapiens
922	1241	Dopamine Receptor D5	P21918	1408	CAPDTSLRASIKKETK	Homo sapiens
923	1241	Dopamine Receptor D5	P21918	1409	PNAVTPGNREVDNDEE	Homo sapiens
924	1241	Dopamine Receptor D5	P21918	1410	QTSFDGDPVAESVWELDC	Homo sapiens
925	1242	Dopamine Receptor D2	P14416	1403	KRSSRAFRHLRAPLKGNC	Homo sapiens
926	1242	Dopamine Receptor D2	P14416	1404	CTVMKNSGSPVNRVRV	Homo sapiens
927	1242	Dopamine Receptor D2	P14416	1405	KPEKNGHAKDHPKIAK	Homo sapiens
928	1242	Dopamine Receptor D2	P14416	1406	GKTRTSKTMSSRKLSGQKE	Homo sapiens
929	1243	Dopamine Receptor D3	P35462	1398	KQRIRKRLTRGNSQC	Homo sapiens
930	1243	Dopamine Receptor D3	P35462	1399	CNSVRPGFPQGTLSPDP	Homo sapiens
931	1243	Dopamine Receptor D3	P35462	1400	CQDTALGGPGFQERGGGE	Homo sapiens
932	1243	Dopamine Receptor D3	P35462	1401	KREEKTRNSLSPTIAP	Homo sapiens
933	1243	Dopamine Receptor D3	P35462	1402	STSLKLGPLQPRGVPLRE	Homo sapiens
934	1244	Dopamine Receptor D4	P21917	1394	VAVAVPLRYNRQGGSR	Homo sapiens
935	1244	Dopamine Receptor D4	P21917	1395	EVARRAKLHGRAPRRP	Homo sapiens
936	1244	Dopamine Receptor D4	P21917	1396	PPSPTPPAPRLPQDPC	Homo sapiens
937	1244	Dopamine Receptor D4	P21917	1397	PPQIPPPQITRRRRRAKITGRE	Homo sapiens
938	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	222	DAYPSAFPSAGANASGP	Homo sapiens
939	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	224	LVDIDRRDPLVVAALHLC	Homo sapiens
940	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	225	KRCFRQLCRKPCGRPD	Homo sapiens
941	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	226	SRPREATARERTAC	Homo sapiens
942	1424	Duffy Antigen	AAC50055.1	1411	TENSSQLDFEDVMNSS	Homo sapiens
943	1424	Duffy Antigen	AAC50055.1	1412	NDSPFDGDYDANLEAAAPC	Homo sapiens
944	1424	Duffy Antigen	AAC50055.1	1413	CHASLGHRLGAGQVPG	Homo sapiens

945	1424	Duffy Antigen	AAC50055.1	1415	FGAKGLKALGMGPGP	Homo sapiens
946	1451	EBV-Induced Gene 2	AAA35924.1	45	KQEARTCMYEPNFEET	Homo sapiens
947	1451	EBV-Induced Gene 2	AAA35924.1	46	KLRTAKGNPLTEKSGVNKK	Homo sapiens
948	1451	EBV-Induced Gene 2	AAA35924.1	47	KSAPENSREMTEIQM	Homo sapiens
949	1451	EBV-Induced Gene 2	AAA35924.1	48	CKGYKRKVMRMILKRQ	Homo sapiens
950	1486	Endothelin B Receptor	BAA14398.1	54	GEERGFPDRATPLLTAE	Homo sapiens
951	1486	Endothelin B Receptor	BAA14398.1	55	RSLAPAEVPGKDRTAGSP	Homo sapiens
952	1486	Endothelin B Receptor	BAA14398.1	56	PRTISPPCCQGGPIKE	Homo sapiens
953	1486	Endothelin B Receptor	BAA14398.1	57	EEKQSLKQSCCLKFKAND	Homo sapiens
954	1488	Endothelin A Receptor	AAB25530.1	49	RYSINLSNHVDDFTFRGTE	Homo sapiens
955	1488	Endothelin A Receptor	AAB25530.1	50	NRRNGSLRIALSEHLK	Homo sapiens
956	1488	Endothelin A Receptor	AAB25530.1	51	EYRGEQHKTCMLNATSK	Homo sapiens
957	1488	Endothelin A Receptor	AAB25530.1	53	KNHDQNNHNIDRSSHKD	Homo sapiens
958	1598	Calcium-Sensing Receptor (CASR)	P41180	1425	RPQIEKFRREEAERDIC	Homo sapiens
959	1598	Calcium-Sensing Receptor (CASR)	P41180	1426	CHLQEGAKGPLPVDIFLR	Homo sapiens
960	1598	Calcium-Sensing Receptor (CASR)	P41180	1427	GHEESGDRFSNSSTAFRPLC	Homo sapiens
961	1598	Calcium-Sensing Receptor (CASR)	P41180	1428	KGIIEGEPTCCFCEVCEPDG	Homo sapiens
962	1598	Calcium-Sensing Receptor (CASR)	P41180	1429	CSTAAAHAFKVAARATLRPSN	Homo sapiens
963	1598	Calcium-Sensing Receptor (CASR)	P41180	1430	PQKNAMAHNRNTHQNSLE	Homo sapiens
964	1598	Calcium-Sensing Receptor (CASR)	P41180	1431	RPEVEDPEELSPALVVSSSQ	Homo sapiens
965	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1878	ASWGGTPEERLKVAITMLTA	Homo sapiens
966	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1879	SEDSAPTNDTAANSAS	Homo sapiens
967	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1880	SVESAGYTVLRILPLVL	Homo sapiens
968	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1881	PVFLFLTVIPNGD	Homo sapiens
969	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2612	EERLKVATIMLTARGIIRFV	Homo sapiens
970	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2613	ERALSEDSAPTNDTAANSAS	Homo sapiens

971	1681	Like Receptor	Follicle Stimulating Hormone	AAA52477.1	58	QESKVTPEPSDLP RNAIELR	Homo sapiens
972	1681	Receptor	Follicle Stimulating Hormone	AAA52477.1	59	DVLEIEADVFSNLPK	Homo sapiens
973	1681	Receptor	Follicle Stimulating Hormone	AAA52477.1	60	RNGHCSSAPRVTSGSTY	Homo sapiens
974	1681	Receptor	Follicle Stimulating Hormone	AAA52477.1	61	RQQRSLAEDNESSYSRGFD	Homo sapiens
975	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2231	CHHRICHCSNRVFLCQE	Homo sapiens
976	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2232	LRVIQKGAFSGFGDLEK	Homo sapiens
977	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2233	LYVMSLLVLNVLAFWIC	Homo sapiens
978	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2234	CNKSLRQEVDMTQARGQR	Homo sapiens
979	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2236	SDNNINLEELPNDVFHGA	Homo sapiens
980	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2238	KLVALMEASLTYPSC	Homo sapiens
981	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2241	SFESVILWLKNGIQEIHNC	Homo sapiens
982	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2248	IHSLQKVLLDIQDNINIHT	Homo sapiens
983	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2250	KANLLYITPEAFQNL	Homo sapiens
984	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2251	CYEMQAQIVRTSSTVH	Homo sapiens
985	1726	Receptor	G Protein-Coupled Receptor RDC1	AAA62370.1	1437	TNTPSSRKKMVRVVC	Homo sapiens
986	1726	Receptor	G Protein-Coupled Receptor RDC1	AAA62370.1	1439	ARASASSDQEKHSRK	Homo sapiens
987	1726	Receptor	G Protein-Coupled Receptor RDC1	AAA62370.1	1440	KYSAKTGLTKLIDASRVSET	Homo sapiens
988	1726	Receptor	G Protein-Coupled Receptor RDC1	AAA62370.1	1893	PDTYLYLKTVSASNNETVC	Homo sapiens
989	1762	Galactin Receptor GalR1	Galactin Receptor GalR1	AAA50767.1	192	GNSLVITVLARSKPGKPR	Homo sapiens
990	1762	Galactin Receptor GalR1	Galactin Receptor GalR1	AAA50767.1	193	PRASNGTFCWEQWDPDRHKK	Homo sapiens

991	1762	Galanin Receptor GαIR1	AAA50767.1	194	KKLNMSKSEASKKKTAAQ	Homo sapiens
992	1762	Galanin Receptor GαIR1	AAA50767.1	195	GNSLVTV/LARSKP	Homo sapiens
993	1762	Galanin Receptor GαIR1	AAA50767.1	196	RKDSHLSDTKENKSRID	Homo sapiens
994	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1250	QTAGELYQRWERYREC	Homo sapiens
995	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1251	CENPEKNEAFDQRLLER	Homo sapiens
996	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1253	CRLLRSLGEEQRQLPERAFR	Homo sapiens
997	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1276	PTSRGLSSGTLPGPGNEA	Homo sapiens
998	1813	Gastrin-Releasing Peptide Receptor	P30550	829	CNISSHADLPVNDDWHPG	Homo sapiens
999	1813	Gastrin-Releasing Peptide Receptor	P30550	830	SDLHPFHEESTNGTFISC	Homo sapiens
1000	1813	Gastrin-Releasing Peptide Receptor	P30550	831	YNLPVEGNIHVKKQIES	Homo sapiens
1001	1813	Gastrin-Releasing Peptide Receptor	P30550	832	CQPGLIIRSHSTGRSTT	Homo sapiens
1002	1814	Cholecystokinin B Receptor	Q16144	1281	CEPRIRAGTRELALR	Homo sapiens
1003	1814	Cholecystokinin B Receptor	Q16144	1282	RVNRQGGLPGAVHQNGRC	Homo sapiens
1004	1814	Cholecystokinin B Receptor	Q16144	1283	LRFDGSDSDSQSRVR	Homo sapiens
1005	1814	Cholecystokinin B Receptor	Q16144	1284	CRPETGAVGKDSGDCY	Homo sapiens
1006	1834	Glucagon Receptor	P47871	837	DGLLRTRYSGKIGDDL	Homo sapiens
1007	1834	Glucagon Receptor	P47871	838	CGPDGGWVRGPRGQPWDRDAS	Homo sapiens
1008	1834	Glucagon Receptor	P47871	839	CQMDGEEIEVGKEVAKMYSS	Homo sapiens
1009	1834	Glucagon Receptor	P47871	840	TSNHRASSSPGHGPPSKE	Homo sapiens
1010	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	206	KLQKWTQKKKEGKKLSRMK	Homo sapiens
1011	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	207	DRSLAIRTRLALKSNKVGQ	Homo sapiens
1012	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	208	RMIHLADSSGQTKVFSQC	Homo sapiens
1013	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	209	DPHELQLNQSKNNIPARLK	Homo sapiens
1014	1945	Opsin, green-sensitive	NP_000504.1	1746	QRLAGRHPQDSYEDSTQSS	Homo sapiens
1015	1945	Opsin, green-sensitive	NP_000504.1	1747	CKPFGNVRFDAKLAIVG	Homo sapiens
1016	1945	Opsin, green-sensitive	NP_000504.1	1748	KTSCGPDVFSGSSYPGVQS	Homo sapiens

1017	1945	Opin, green-sensitive	NP_000504.1	1750	CILQLFGKKVDDGSELSS	Homo sapiens
1018	1945	Opin, green-sensitive	NP_000504.1	1767	STRGPFGPNYHIAPR	Homo sapiens
1019	1945	Opin, green-sensitive	NP_000504.1	1768	TNGLVLAATMKFKLR	Homo sapiens
1020	1945	Opin, green-sensitive	NP_000504.1	1769	ELSSASKTEVSSVSP	Homo sapiens
1021	1951	Growth Hormone	Q92847	581	ADLDWDASPGNDSLGD	Homo sapiens
1022	1951	Secretagogue Receptor	Q92847	582	GVEHENGTDPWDITNEC	Homo sapiens
1023	1951	Secretagogue Receptor	Q92847	583	KLWRRRRGDVAVGASL	Homo sapiens
1024	1951	Secretagogue Receptor	Q92847	584	SQRKSLTLKDESSRAW	Homo sapiens
1025	1954	Secretagogue Receptor	Q02643	833	REDESACIQAAEEMPNTILG	Homo sapiens
1026	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	834	CPDFFHFSSGAVKRD	Homo sapiens
1027	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	835	VRKLEPAQGSLSHTQSQ	Homo sapiens
1028	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	836	RTEISRKWHGHDPPELL	Homo sapiens
1029	2120	Histamine H1 Receptor	P35367	1167	GWNHFMQQTSVRREDKC	Homo sapiens
1030	2120	Histamine H1 Receptor	P35367	1168	CQHRELINRSLPSFSEIKLR	Homo sapiens
1031	2120	Histamine H1 Receptor	P35367	1169	AGGGSVLKSPSQTPKE	Homo sapiens
1032	2120	Histamine H1 Receptor	P35367	1170	KSPVVFSGEDDREVDKLYC	Homo sapiens
1033	2120	Histamine H1 Receptor	P35367	1171	TAPGKGKLRSGSNTGLD	Homo sapiens
1034	2120	Histamine H1 Receptor	P35367	1172	KRLRSHSRQVAVSGLHMINRE	Homo sapiens
1035	2121	Histamine H2 Receptor	P25021	1173	NSRNETSKGNHTSKC	Homo sapiens
1036	2121	Histamine H2 Receptor	P25021	1174	CITYVRIKVARDAQAKR	Homo sapiens
1037	2121	Histamine H2 Receptor	P25021	1175	RDQAKRINHSSWKAA	Homo sapiens
1038	2121	Histamine H2 Receptor	P25021	1176	TAFVVRGLRGDDAINE	Homo sapiens
1039	2121	Histamine H2 Receptor	P25021	1177	HKTSLRNASQLSRITQSRE	Homo sapiens
1040	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	227	DSNGSAGSEDAQLEPA	Homo sapiens
1041	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	228	KVREDVDVIECSLQFPDDD	Homo sapiens
1042	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	229	RNTVQDPAYLRDIDGMINK	Homo sapiens
1043	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	230	CFPLKMRMERQSTSRVRN	Homo sapiens

1044	2964	(OPRK1) Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1432	CNTGIRKFPDVTKVFSSES	Homo sapiens
1045	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1433	KMHNGAFRGATGPKTLD	Homo sapiens
1046	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1434	CESTVRKVSNTKLYSS	Homo sapiens
1047	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1435	FAVRNPELMATNKDTK	Homo sapiens
1048	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1436	CKRRAELYRRKDFSAVTSN	Homo sapiens
1049	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	210	ERHITVFRMQLHTRMSNRR	Homo sapiens
1050	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	211	RQRTMRMSRHSRGPRNRD	Homo sapiens
1051	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	212	KHLATEWNTVSKLVM	Homo sapiens
1052	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	213	ENPTGPTESDRSASSLN	Homo sapiens
1053	3038	G Protein-Coupled Receptor MRG	AAB21255.1	184	ESQISLSCSLCHSGDQEAQ	Homo sapiens
1054	3038	G Protein-Coupled Receptor MRG	AAB21255.1	185	QQQKATRVYAVVQISAPM	Homo sapiens
1055	3038	G Protein-Coupled Receptor MRG	AAB21255.1	186	DKPEVGRNKKAAAGIDPME	Homo sapiens
1056	3038	G Protein-Coupled Receptor MRG	AAB21255.1	187	EQPHSTQHVENLLPREHRVD	Homo sapiens
1057	3057	Melanocortin 3 Receptor (MC3R)	P41968	451	RLHVKRIAALPPADGVAPQ	Homo sapiens
1058	3057	Melanocortin 3 Receptor (MC3R)	P41968	452	DPLVAFRSLELRNIFRE	Homo sapiens
1059	3057	Melanocortin 3 Receptor (MC3R)	P41968	562	QAPFFSNQSSSAFCCEQVFI	Homo sapiens
1060	3057	Melanocortin 3 Receptor (MC3R)	P41968	563	IVHSDYLTFEDQFIQHMDNI	Homo sapiens

1061	3058	(MC3R)	Melanocortin 4 Receptor	AAB33341.1	1032	HSNASESLGKGYSDGGC	Homo sapiens
1062	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1033	KRIAVLPGTGAIHQGA	Homo sapiens
1063	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1035	NSTDIDAQSFTVIDN	Homo sapiens
1064	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1469	NSTHRGMHTSLHLWNRSSYR	Homo sapiens
1065	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1022	ATEGNLSGPNVKNKSSPC	Homo sapiens
1066	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1024	NKHLVIADAFVRHIDN	Homo sapiens
1067	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1025	MNSSFHLHFLDLNLNAT	Homo sapiens
1068	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1026	RYHHIMTARRSGAIIAG	Homo sapiens
1069	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1036	QGSQRRLGSLNSTPT	Homo sapiens
1070	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1038	EAGALVARAAVLQQLD	Homo sapiens
1071	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1039	ALRYHSIVTLPRARQA	Homo sapiens
1072	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1040	CQHAGGIARLHKRQRP	Homo sapiens
1073	3079	Melatonin Receptor type 1a	AAB17720.1	214	HSKYDKLYSSKNSLC	Homo sapiens	
1074	3079	Melatonin Receptor type 1a	AAB17720.1	215	CTARVFFVDSSNDVADR	Homo sapiens	
1075	3079	Melatonin Receptor type 1a	AAB17720.1	216	QVRQRVKPDRPKLKP	Homo sapiens	
1076	3079	Melatonin Receptor type 1a	AAB17720.1	217	DSSNDVADRVKWKPSPLMTN	Homo sapiens	
1077	3080	Melatonin Receptor type 1b	P49286	930	AVRPGWSGAGSARPSR	Homo sapiens	
1078	3080	Melatonin Receptor type 1b	P49286	931	LVAIFYDGWALGEEHC	Homo sapiens	
1079	3080	Melatonin Receptor type 1b	P49286	932	LVLGARRKAKPESRLC	Homo sapiens	
1080	3080	Melatonin Receptor type 1b	P49286	933	CIGDASKGSHAEGLQSPA	Homo sapiens	
1081	3080	Melatonin Receptor type 1b	P49286	934	QEMAPQIPEGLFVTSY	Homo sapiens	
1082	3081	Melatonin-Related Receptor	Q13585	751	LAARDPAGQNPDPNQLAE	Homo sapiens	
1083	3081	Melatonin-Related Receptor	Q13585	752	ARARAHARDQAREGDRAHAC	Homo sapiens	
1084	3081	Melatonin-Related Receptor	Q13585	753	DRASGHPKPHSRSSAY	Homo sapiens	
1085	3081	Melatonin-Related Receptor	Q13585	754	HPKPAADNPGLSASHC	Homo sapiens	

1086	3081	Melatonin-Related Receptor	Q13585	755	DDSDLPESASSPAAAGPT	Homo sapiens
1087	3093	Metabotropic Glutamate Receptor 1	Q13255	879	DDYKIQMINKGVVRSVC	Homo sapiens
1088	3093	Metabotropic Glutamate Receptor 1	Q13255	880	CRSNFLNIIFRRKKAG	Homo sapiens
1089	3093	Metabotropic Glutamate Receptor 1	Q13255	881	DTSTKILYNVEEEDA	Homo sapiens
1090	3093	Metabotropic Glutamate Receptor 1	Q13255	882	ERFKLLQEVVVEHERE	Homo sapiens
1091	3094	Metabotropic Glutamate Receptor 2	Q14416	891	DFVRASLSRGADGSRHIC	Homo sapiens
1092	3094	Metabotropic Glutamate Receptor 2	Q14416	892	CVATSEKVGGRAMSRAAFEG	Homo sapiens
1093	3094	Metabotropic Glutamate Receptor 2	Q14416	893	CAAHSLRAVPFEQESK	Homo sapiens
1094	3094	Metabotropic Glutamate Receptor 2	Q14416	894	CDAMRPVNGRRLYKDF	Homo sapiens
1095	3094	Metabotropic Glutamate Receptor 2	Q14416	895	DAPERPADTHNEVRFDR	Homo sapiens
1096	3094	Metabotropic Glutamate Receptor 2	Q14416	896	GKETAPERREVTLRC	Homo sapiens
1097	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	897	GGLFPINEKGIGTEEC	Homo sapiens
1098	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	898	EFVRASLTKVDEAEYMC	Homo sapiens
1099	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	899	RSNIRKSYDSVIRELL	Homo sapiens
1100	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	900	CDKHLAIDSSNYEQES	Homo sapiens
1101	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	902	GTRRYTLAEKRETVILKC	Homo sapiens
1102	3096	Metabotropic Glutamate Receptor 4	Q14833	909	PSSLGKPKGHPHMINIRID	Homo sapiens
1103	3096	Metabotropic Glutamate Receptor 4	Q14833	910	CGSGGPPITIKPERVVG	Homo sapiens
1104	3096	Metabotropic Glutamate Receptor 4	Q14833	911	CKLSRHALKKGSHVKK	Homo sapiens
1105	3096	Metabotropic Glutamate Receptor 4	Q14833	913	CPRMDPVDGTQLLYKI	Homo sapiens

1106	3096	Metabotropic Glutamate Receptor 4	Q14833	914	RIERMHWP GSGGQQLPR SIC	Homo sapiens
1107	3097	Metabotropic Glutamate Receptor 5	P41594	883	KDYFDYIN VGSWDNGEL	Homo sapiens
1108	3097	Metabotropic Glutamate Receptor 5	P41594	884	KMDDDEV VSKSNIIR SVC	Homo sapiens
1109	3097	Metabotropic Glutamate Receptor 5	P41594	885	GETLRYKDRRLAQHKSEIEC	Homo sapiens
1110	3097	Metabotropic Glutamate Receptor 5	P41594	886	NPNQTAVIKPFPKSTE	Homo sapiens
1111	3097	Metabotropic Glutamate Receptor 5	P41594	887	KALYDVAEAEHFAPA	Homo sapiens
1112	3097	Metabotropic Glutamate Receptor 5	P41594	888	RSPSPITLSHRAGSASRTD	Homo sapiens
1113	3097	Metabotropic Glutamate Receptor 5	P41594	889	RESPAAGPEAAAKPD	Homo sapiens
1114	3098	Metabotropic Glutamate Receptor 6	O15303	903	QALIRGRGDDEVGVRC	Homo sapiens
1115	3098	Metabotropic Glutamate Receptor 6	O15303	904	KLTSSTGTSDDSTRKC	Homo sapiens
1116	3098	Metabotropic Glutamate Receptor 6	O15303	905	DVEALQWSDPHEVPSSLC	Homo sapiens
1117	3098	Metabotropic Glutamate Receptor 6	O15303	906	RFQVDEFTCEACPGDM	Homo sapiens
1118	3098	Metabotropic Glutamate Receptor 6	O15303	907	GARPHSHVIDYEEQRT	Homo sapiens
1119	3099	Metabotropic Glutamate Receptor 7	Q14831	917	CIAGSVRIPQERKDRITDFD	Homo sapiens
1120	3099	Metabotropic Glutamate Receptor 7	Q14831	918	NDEDIKQILAAAKRAD	Homo sapiens
1121	3099	Metabotropic Glutamate Receptor 7	Q14831	921	NIEDMQWGWKGVR EIPASVC	Homo sapiens
1122	3099	Metabotropic Glutamate Receptor 7	Q14831	2693	IKQLLDTPNRAVWI	Homo sapiens
1123	3099	Metabotropic Glutamate Receptor 7	Q14831	2694	DPPNIIDYDEHKTM	Homo sapiens
1124	3100	Metabotropic Glutamate Receptor 8	O00222	922	CANGDPPIFTKPKIS	Homo sapiens
1125	3100	Metabotropic Glutamate	O00222	923	CPRMSTIDGKELGYIRA	Homo sapiens

1126	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	924	KVEDMQWAHREHTHPASVC	Homo sapiens
1127	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	925	CESLETNTSSTKITYSYS	Homo sapiens
1128	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	1894	KFWILTMMQIRTHSQEVAHS	Homo sapiens
1129	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	231	DGNLSDPCGPNRTNLGGRDS	Homo sapiens
1130	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	232	DRINHQLLENLEAETAPLP	Homo sapiens
1131	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	233	IKALVTIPETTFQTVS	Homo sapiens
1132	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	234	RIRQNTRDHPSTANTVDR	Homo sapiens
1133	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1325	SERSQPGAEGSPETPPGRC	Homo sapiens
1134	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1326	CRAPRLQAYSWKEEE	Homo sapiens
1135	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1327	SSEGEPPGSEVVKMP	Homo sapiens
1136	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1328	KQPPRSPNTVKRPTKKGRD	Homo sapiens
1137	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1329	CRWDKRRWRKIPKPPGS	Homo sapiens
1138	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1330	EHNKIQNGKAPRDPVTENC	Homo sapiens
1139	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1331	DSTSVSAVASNMIRDDE	Homo sapiens
1140	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1332	ENTVSTSLGHSKDENSEKQIC	Homo sapiens
1141	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1333	DEKQINIVARKIVKMTK	Homo sapiens
1142	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1831	RIKKDKKEPVANQDPVSPSL	Homo sapiens
1143	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	218	SRSRVHKHRPEGPKEKKAKT	Homo sapiens
1144	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	219	KKRPPGGRPGGLRNGKLEEA	Homo sapiens
1145	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	220	DKDTSNESSSGSATQNTKER	Homo sapiens
1146	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	221	RPAANVARKEFASARNQVRK	Homo sapiens

1147	3227	Muscarinic Acetylcholine Receptor M5	P08912	1334	KAEKRKPAAHRAALFRSC	Homo sapiens
1148	3227	Muscarinic Acetylcholine Receptor M5	P08912	1335	CSSYPSEDEDEKPAITD	Homo sapiens
1149	3227	Muscarinic Acetylcholine Receptor M5	P08912	1336	KESPGEEFSAETETFTV	Homo sapiens
1150	3227	Muscarinic Acetylcholine Receptor M5	P08912	1337	KFRLVVKADGNQETNNGC	Homo sapiens
1151	3227	Muscarinic Acetylcholine Receptor M5	P08912	1338	KEPSTKGLNPNPSHQM	Homo sapiens
1152	3378	Tachykinin Receptor 3	NP_001050.1	1757	PAAETWIDGGGGVGAD	Homo sapiens
1153	3378	Tachykinin Receptor 3	NP_001050.1	1759	PSQPWANLTNQFVQPSWR	Homo sapiens
1154	3378	Tachykinin Receptor 3	NP_001050.1	1760	SRKKRATRPDRPSFNGC	Homo sapiens
1155	3378	Tachykinin Receptor 3	NP_001050.1	2265	ADAVNLITASLAAGAA	Homo sapiens
1156	3378	Tachykinin Receptor 3	NP_001050.1	2290	SPSALGLPVASAPSPQP	Homo sapiens
1157	3380	Neuromedin B Receptor	P28336	824	ERDFLPASDGTTELIVRC	Homo sapiens
1158	3380	Neuromedin B Receptor	P28336	825	KTUKSAHNLPGEYNE	Homo sapiens
1159	3380	Neuromedin B Receptor	P28336	826	SEVARISLDNSSFAC	Homo sapiens
1160	3380	Neuromedin B Receptor	P28336	828	CGRKSYQERGTSYLLSSA	Homo sapiens
1161	3404	Neuropeptide Y Receptor Type 2	P49146	1057	RGELVPDPELIDST	Homo sapiens
1162	3404	Neuropeptide Y Receptor Type 2	P49146	1058	CIVYHLESKIKRISF	Homo sapiens
1163	3404	Neuropeptide Y Receptor Type 2	P49146	1059	REYSLEIPDFEIVAC	Homo sapiens
1164	3404	Neuropeptide Y Receptor Type 2	P49146	1060	NDHYHQRRGKTKMLVC	Homo sapiens
1165	3404	Neuropeptide Y Receptor Type 2	P49146	1061	CEQRLDAIHSEVSVTFKAKK	Homo sapiens
1166	3404	Neuropeptide Y Receptor Type 2	P49146	2297	MGPIGAEDENQIVTEEMKVE	Homo sapiens
1167	3404	Neuropeptide Y Receptor Type 2	P49146	2298	SEVSVTFKAKKNLEVRKNSG	Homo sapiens
1168	3405	Neuropeptide Y Receptor Type 4	P50391	1068	CVTVRQKEKANVTNLL	Homo sapiens
1169	3405	Neuropeptide Y Receptor Type 4	P50391	1069	KNHSKALEFLADKVVVC	Homo sapiens
1170	3405	Neuropeptide Y Receptor Type 4	P50391	1070	CYAIRVRLQRQGRVFFHKG	Homo sapiens

1171	3405	Type 4 Neuropeptide Y Receptor	P50391	1071	CQGSAPLEESEHLPLST	Homo sapiens
1172	3405	Type 4 Neuropeptide Y Receptor	P50391	2275	SEHCQSDVDVMVFVITS	Homo sapiens
1173	3406	Type 4 Neuropeptide Y Receptor	Q15761	1072	MKKRNGKTTVNFUGN	Homo sapiens
1174	3406	Type 5 Neuropeptide Y Receptor	Q15761	1073	CGLSNKENRLEENEMI	Homo sapiens
1175	3406	Type 5 Neuropeptide Y Receptor	Q15761	1074	NLTHPSKSKSGPQVKL	Homo sapiens
1176	3406	Type 5 Neuropeptide Y Receptor	Q15761	1075	SFIKKHRRRYSKKTAC	Homo sapiens
1177	3406	Type 5 Neuropeptide Y Receptor	Q15761	1076	PERPSQENHSRIIPEN	Homo sapiens
1178	3406	Type 5 Neuropeptide Y Receptor	Q15761	1077	CFEIKPEENSDEVHELRV	Homo sapiens
1179	3408	Neurotensin Receptor Type 1	P30989	935	RVLAAPSSSELDVNTDIYS	Homo sapiens
1180	3408	Neurotensin Receptor Type 1	P30989	936	CHPFKAKTLMRSRTKK	Homo sapiens
1181	3408	Neurotensin Receptor Type 1	P30989	937	GEQNRSADGGQHAGGLVC	Homo sapiens
1182	3408	Neurotensin Receptor Type 1	P30989	938	RQAAEQGGQVCTVGGEHS	Homo sapiens
1183	3408	Neurotensin Receptor Type 1	P30989	939	CPVWRRRRKRPAFSRKADS	Homo sapiens
1184	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	940	CHPIRALDVRTSSKAQA	Homo sapiens
1185	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	941	PVAIMGSAQVEDEIEEC	Homo sapiens
1186	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	942	GVQPSSETAVAILRFC	Homo sapiens
1187	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	943	CASALRRDVQVSDRVRSIAK	Homo sapiens
1188	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2123	TPEPRRTQPMASPRLGIFC	Homo sapiens
1189	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2124	TAVASLLKRGQGYTE	Homo sapiens

1190	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2125	EMQTDINGGSLKPVRTAAK	Homo sapiens
1191	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2126	CSLGFQSPRKEIQWES	Homo sapiens
1192	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2127	SEGSDDASTIEHTASESC	Homo sapiens
1193	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2128	NPASGKVSQVGGQTSD	Homo sapiens
1194	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1486	CKKLHPLKAQNLDISRIK	Homo sapiens
1195	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1500	KIVKPLWTSFIQSVSYSKLL	Homo sapiens
1196	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1502	TAITKKIFKSHLKSSRNSTS	Homo sapiens
1197	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1503	VKKKSSRNIFSVVFFVC	Homo sapiens
1198	3582	Oxytocin Receptor	CAA46097.1	244	AEGNRTAGPPRRNEALARVE	Homo sapiens
1199	3582	Oxytocin Receptor	CAA46097.1	245	RLAVLATWLGCLVASAP	Homo sapiens
1200	3582	Oxytocin Receptor	CAA46097.1	246	PEGAAAGDGGRVALAR	Homo sapiens
1201	3582	Oxytocin Receptor	CAA46097.1	247	YLGRRRLGETASKKSNSSS	Homo sapiens
1202	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	854	MQRIGDVLGSSSEDFRR	Homo sapiens
1203	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	855	ARGGRVTCHDTSAPEL	Homo sapiens
1204	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	856	KPAYGTSGGLPRAKRK	Homo sapiens
1205	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	857	TGPPSPATPARRRLGLRRSD	Homo sapiens
1206	3595	Purinergic Receptor P2Y1	CAA07339.1	386	RYSGVWVPLKSLGRLKKKN	Homo sapiens
1207	3595	Purinergic Receptor P2Y1	CAA07339.1	387	SGTGVRKNKTTTCYD	Homo sapiens
1208	3595	Purinergic Receptor P2Y1	CAA07339.1	388	RALYKDLDNSPLRRKS	Homo sapiens
1209	3595	Purinergic Receptor P2Y1	CAA07339.1	389	DTFRRRLSRATRKASRRSE	Homo sapiens
1210	3596	Purinergic Receptor P2Y5	P43657	850	FVQSTHSQGNNAEAC	Homo sapiens
1211	3596	Purinergic Receptor P2Y5	P43657	851	MVLKLTLPVTLRSKI	Homo sapiens
1212	3596	Purinergic Receptor P2Y5	P43657	852	TIQNSIKMKVNSVRRSD	Homo sapiens
1213	3596	Purinergic Receptor P2Y5	P43657	853	SEVHGAENFIQHNLQTLK	Homo sapiens
1214	3597	Purinergic Receptor P2Y6	Q15077	874	CTSRRLTRTAVVTLN	Homo sapiens
1215	3597	Purinergic Receptor P2Y6	Q15077	875	AQERRGKKAARMAMVVV	Homo sapiens

1216	3597	Purinergic Receptor P2Y6	Q15077	876	TKTAYLAVRSTPGVPC	Homo sapiens
1217	3597	Purinergic Receptor P2Y6	Q15077	877	KKFRRRPHELLQKLIK	Homo sapiens
1218	3597	Purinergic Receptor P2Y6	Q15077	2726	CHPLAPWHKRGGRRAAW	Homo sapiens
1219	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	870	CFRMKMRSETAIFIN	Homo sapiens
1220	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	871	RTLKPAATLSQIGTNKK	Homo sapiens
1221	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	872	ESFQKSFYINAHIRMES	Homo sapiens
1222	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	873	KTETPLTTKPSLPAIQEE	Homo sapiens
1223	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	1895	SSLRPLRGNATANITCVD	Homo sapiens
1224	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	248	KAKVQCELNITLQLEGE	Homo sapiens
1225	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	249	ESLIMQDDPQNSIEATSVDK	Homo sapiens
1226	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	250	NSEQDCLPHSFHEETKE	Homo sapiens
1227	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	251	EETKEDSGRQGGDILMEKPS	Homo sapiens
1228	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	761	CEKRLKEVLQRPASIMESDK	Homo sapiens
1229	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	762	ESEEDKEAPTGSRYRGRPC	Homo sapiens
1230	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	763	LYSGATLDEAERLITEELR	Homo sapiens
1231	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	765	KDDGFLNGSCSGLDEEASG	Homo sapiens
1232	3732	PACAP Receptor Type 1	P41586	944	CLEKIQRANELMGFNDSS	Homo sapiens
1233	3732	PACAP Receptor Type 1	P41586	945	CPELFRIFNPDQVWETET	Homo sapiens
1234	3732	PACAP Receptor Type 1	P41586	946	DSNSLDLSDMGVWSRNC	Homo sapiens
1235	3732	PACAP Receptor Type 1	P41586	948	IKRKWRSWKVNRYFAVD	Homo sapiens
1236	3732	PACAP Receptor Type 1	P41586	2292	ESDFGDSNSLDLSDMGVWSR	Homo sapiens
1237	3844	Apelin Receptor	AAA18954.1	62	RTIGDLENTIKVQC	Homo sapiens
1238	3844	Apelin Receptor	AAA18954.1	63	RSSREKRRSADIFAS	Homo sapiens
1239	3844	Apelin Receptor	AAA18954.1	64	QTIAGHFHFKERIEGLKRRR	Homo sapiens
1240	3844	Apelin Receptor	AAA18954.1	65	GPNMKGGEQIMHEKSIPIYSQ	Homo sapiens

1241	3845	Chemokine-Like Receptor 1 (CMKLR1)	LR39	447	RMEDEDYNTSYSGDEYPD	Homo sapiens
1242	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	448	DSIVVLEDLSPLEARVTR	Homo sapiens
1243	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	449	LTIVCKLHRNRLAKTKPKF	Homo sapiens
1244	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	450	RSFTKMSSMINERTSMNIRE	Homo sapiens
1245	3846	Spingolipid Receptor Edg1	AAA52336.1	1010	TRSRRLIFRKNISKASRSSE	Homo sapiens
1246	3846	Spingolipid Receptor Edg1	AAA52336.1	1011	CPSGDSAGKFKRPIIAG	Homo sapiens
1247	3846	Spingolipid Receptor Edg1	AAA52336.1	1012	CPSGDSAGKFKRPIIAGME	Homo sapiens
1248	3846	Spingolipid Receptor Edg1	AAA52336.1	1013	RKSDNSSHPPQKDEGD	Homo sapiens
1249	3847	Spingolipid Receptor Edg3	Q99500	1028	ERHLTIKIMRPPYDANK	Homo sapiens
1250	3847	Spingolipid Receptor Edg3	Q99500	1029	LVKSSSRKVANHINSE	Homo sapiens
1251	3847	Spingolipid Receptor Edg3	Q99500	1030	SPKVKEDLPHTDPSSC	Homo sapiens
1252	3847	Spingolipid Receptor Edg3	Q99500	1031	CLVRGRGARASPIQPALD	Homo sapiens
1253	3847	Spingolipid Receptor Edg3	Q99500	1752	REHYGVV/GKLAGRLKEASE	Homo sapiens
1254	3848	C-C Chemokine Receptor 9	P51686	958	RAHTWREKRLLYSKMVC	Homo sapiens
1255	3848	C-C Chemokine Receptor 9	P51686	959	KEESGIAICTMVVPSDEST	Homo sapiens
1256	3848	C-C Chemokine Receptor 9	P51686	960	QAAKSSKHKALKVTIT	Homo sapiens
1257	3848	C-C Chemokine Receptor 9	P51686	961	GERFRDLVTKNLGC	Homo sapiens
1258	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	74	ENYSYDLDVYSLESDLEEK	Homo sapiens
1259	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	75	RDTVEFNINHTLCYNNIFQKHD	Homo sapiens
1260	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	76	SKKFQARFRSSVAELK	Homo sapiens
1261	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	77	GTVSEQLRNSETKNLC	Homo sapiens
1262	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1087	HLPLRRISRLSAYAV	Homo sapiens
1263	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1088	CEEFWGSGERQRQLYA	Homo sapiens
1264	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1089	SVYRVSVKLRNRVPGC	Homo sapiens
1265	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1090	CVTQSQADWDRARRRR	Homo sapiens
1266	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1091	DSFREELRKLVAWPRKIA	Homo sapiens

1267	3851	Receptor 10 (GPR10) G Protein-Coupled Receptor GPR12	AAA91630.1	78	GCIPSSLAQRARSPSD	Homo sapiens
1268	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	79	ENISAAVSSRP/PAVEPEPE	Homo sapiens
1269	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	307	STCSVVRLTKNNAA	Homo sapiens
1270	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	308	QSEATKLVIGLIVAS	Homo sapiens
1271	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	84	KQKENECLGDYPEVLQE	Homo sapiens
1272	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	85	SMNNRTVQHGVTISL	Homo sapiens
1273	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	86	ETLKLYDFPSCDMRKDLR	Homo sapiens
1274	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	87	GRSVHVDFFSSSESQSRHGS	Homo sapiens
1275	3853	Fractalkine Receptor 1 G Protein-Coupled Receptor GPR15	NP_005281.1	1511	CLKNYDFGSSSTETSDSHLTK	Homo sapiens
1276	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1512	KALSTHIAEDFARRKRS	Homo sapiens
1277	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1612	ATSPNSDIRETHSVP	Homo sapiens
1278	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1613	LMGALHFKPGSRRLUD	Homo sapiens
1279	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1615	GLPTLLSRELTUDDKPYC	Homo sapiens
1280	3854	Receptor GPR15 G Protein-Coupled Receptor GPR18	AAB65819.1	93	DRYMAIVQPKYAKELKNTC	Homo sapiens
1281	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	94	KDPDKDSTPATCLKISD	Homo sapiens
1282	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	95	GRTSKLKPVKESKIR	Homo sapiens
1283	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	96	RNYLRSRLRKSFRRSGSLR	Homo sapiens
1284	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	97	KVSREKAKKMAIASWIFD	Homo sapiens
1285	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	98	DGRTVRRITMNIIVPTIKVK	Homo sapiens

1286	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	99	RRGMKETFCMSSMKC	Homo sapiens
1287	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	100	KTITKDSYDSFDREAKEKK	Homo sapiens
1288	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1152	ALLFSQDGGQREGQRRC	Homo sapiens
1289	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1153	SGDEEDAYSAEPLPELC	Homo sapiens
1290	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1154	ALLDTADILLAARERSC	Homo sapiens
1291	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1155	RRLRGSSPSGPQPRRGC	Homo sapiens
1292	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	101	KSGRHHLSAGPHALTQ	Homo sapiens
1293	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	102	RTNASGLEVPLFLFARLDE	Homo sapiens
1294	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	103	SRPGLLHQGRQRVRVAMQ	Homo sapiens
1295	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	104	GQHGEREPSSGDVVMHRSS	Homo sapiens
1296	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	105	SERQARFSSQSGETGEVQAC	Homo sapiens
1297	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	106	DPTVRSKGPLNGC	Homo sapiens
1298	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	107	NSTLDGNQSSHPPFCLL	Homo sapiens
1299	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	108	CASQITANDPYTVRSK	Homo sapiens
1300	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	109	EINMQSESNTVRRDDIDD	Homo sapiens
1301	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	111	RRAVKRHRERRERQKRVFRM	Homo sapiens
1302	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	112	TRQKFQKVLKSKMKKR	Homo sapiens
1303	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	113	DPKRNKKTIFESEIREKR	Homo sapiens
1304	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1532	CAPGQGGRRWRLPQPAWVEG	Homo sapiens
1305	3860	G Protein-Coupled	AAH01736.1	1533	EASLLPTGPNASNTSDGPDN	Homo sapiens

1306	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1539	KGVGRAVGLGGGGCCQATE	Homo sapiens
1307	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1565	RMITSSVAPASQRSIRLTKR	Homo sapiens
1308	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1567	RAVSNAGTADERTESKG	Homo sapiens
1309	3861	Receptor SLC/MCH1 G Protein-Coupled	O00155	376	RGLQLPGGQDSQCGEEP	Homo sapiens
1310	3861	Receptor GPR25 G Protein-Coupled	O00155	377	CRISRLRRPPHVGRARRNS	Homo sapiens
1311	3861	Receptor GPR25 G Protein-Coupled	O00155	378	RTGRLARRISSASSLSRDD	Homo sapiens
1312	3861	Receptor GPR25 G Protein-Coupled	O00155	483	DYSGLDGLEELELCPAGD	Homo sapiens
1313	3862	Receptor GPR25 G Protein-Coupled	AAB60402.1	118	TVYCLLGDAHSPLYT	Homo sapiens
1314	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	119	EGPTGPAAPLPSPKAWD	Homo sapiens
1315	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	120	HFAAVFCIGSAEMSL	Homo sapiens
1316	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	121	GLTTCGVVYPLSKNH	Homo sapiens
1317	3863	Receptor GPR3 G Protein-Coupled	O00270	1157	REPEKQPKLQRAGALVTLV	Homo sapiens
1318	3863	Receptor GPR31 G Protein-Coupled	O00270	1158	CHSFYSRADGGSFSIWQEA	Homo sapiens
1319	3863	Receptor GPR31 G Protein-Coupled	O00270	1159	QNLGSCRALCAVAHTSDVTG	Homo sapiens
1320	3863	Receptor GPR31 G Protein-Coupled	O00270	1160	SPTEFSSVRRVFHTLRGKGQ	Homo sapiens
1321	3864	Receptor GPR31 G Protein-Coupled	AAA98457.1	143	DELFRDRYNHTCFEKFPMIE	Homo sapiens
1322	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	144	LRAVRGSVSTERQEKAKIKR	Homo sapiens
1323	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	145	RSDVAKALHNLLRFLASDK	Homo sapiens
1324	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	146	NASLTLETPLTSKRNSTAK	Homo sapiens

1325	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	166	FQYLVPSVSLTVG	Homo sapiens
1326	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	167	CLAERAACSVVRPLARSH	Homo sapiens
1327	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	168	HLVVRICQVVRHAH	Homo sapiens
1328	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	169	EIQRALWLLCGCFQSK	Homo sapiens
1329	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	171	ATAESRRVAGRITYSAAR	Homo sapiens
1330	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	172	RLDDEGRRQCVLVFPQPE	Homo sapiens
1331	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	173	RLHAMRLDSHAKALERAKKR	Homo sapiens
1332	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	174	DASFRNLRQLTIC	Homo sapiens
1333	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	175	NVSQDNGTGHINATFSEP	Homo sapiens
1334	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	176	RSRHMPWRTYRGAKVAS	Homo sapiens
1335	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	177	VRLPSGAKALGKARRK	Homo sapiens
1336	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	178	LDDNFRKNFRSLRC	Homo sapiens
1337	3869	G Protein-Coupled Receptor HM74	BAA01721.1	179	QDHFLEIDKKNCVFRDD	Homo sapiens
1338	3869	G Protein-Coupled Receptor HM74	BAA01721.1	180	ARIWSLRQRQMDRHAKIKR	Homo sapiens
1339	3869	G Protein-Coupled Receptor HM74	BAA01721.1	181	CLQRKMTGEPDNNRSTVE	Homo sapiens
1340	3869	G Protein-Coupled Receptor HM74	BAA01721.1	182	DPNKTGGAPEALMANSGE	Homo sapiens
1341	3869	G Protein-Coupled Receptor HM74	BAA01721.1	183	SNINHKKGHCHQEPASLEKQ	Homo sapiens
1342	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1453	RQRQMDRHAKIKRAITFIMV	Homo sapiens
1343	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1454	SPSYLGPTSNHNSKKG	Homo sapiens
1344	3870	G Protein-Coupled	Q15743	1192	AVRRSHGTQKSRKDKI	Homo sapiens

1345	3870	Receptor OGR1 G Protein-Coupled Receptor OGR1	Q15743	1193	LMHEEVIEDENQHRVC	Homo sapiens
1346	3870	G Protein-Coupled Receptor OGR1	Q15743	1194	CFVSETHRDLARLRG	Homo sapiens
1347	3870	G Protein-Coupled Receptor OGR1	Q15743	1195	CSRTGRAREAYPLGAPEASG	Homo sapiens
1348	3921	Prostaglandin D2 Receptor	P43119	1188	CRMYRQQKRHQGSLGPRRT	Homo sapiens
1349	3921	Prostaglandin D2 Receptor	P43119	1189	CFTQAVAPDSSEMVD	Homo sapiens
1350	3921	Prostaglandin D2 Receptor	P43119	1190	ASGRDRPRAPSAPVGKEGSC	Homo sapiens
1351	3921	Prostaglandin D2 Receptor	P43119	1191	SAWGEQGVEPLPTGQ	Homo sapiens
1352	3923	Prostaglandin D2 Receptor	Q13258	458	K3PFYRCQNTTSVEKGN SAV	Homo sapiens
1353	3923	Prostaglandin D2 Receptor	Q13258	459	RNLYAMHRRLQRHPRSC	Homo sapiens
1354	3923	Prostaglandin D2 Receptor	Q13258	503	CAEPRADGREASQPLEEL	Homo sapiens
1355	3923	Prostaglandin D2 Receptor	Q13258	504	KDVKEKNRTSEAEEDLRALR	Homo sapiens
1356	3924	Prostaglandin E Receptor EP1	P34995	962	AQAAGRLRRRSATTF	Homo sapiens
1357	3924	Prostaglandin E Receptor EP1	P34995	963	CVGVTRPLLHAARVSVARAR	Homo sapiens
1358	3924	Prostaglandin E Receptor EP1	P34995	964	CNTLSGLALHARWR	Homo sapiens
1359	3924	Prostaglandin E Receptor EP1	P34995	965	ASGPDSSRRRWGAHGPR	Homo sapiens
1360	3924	Prostaglandin E Receptor EP1	P34995	966	SGSARRARAHDEVIMVGQ	Homo sapiens
1361	3925	Prostaglandin E Receptor EP2	AAD44177.1	967	IALALLARRWRGVDVGC	Homo sapiens
1362	3925	Prostaglandin E Receptor EP2	AAD44177.1	968	CETRQWLPPGESPAISSV	Homo sapiens
1363	3925	Prostaglandin E Receptor EP2	AAD44177.1	969	GPSLGSGRGGPGARRRGE	Homo sapiens
1364	3925	Prostaglandin E Receptor EP2	AAD44177.1	971	NETSSRKEKWDLQALR	Homo sapiens
1365	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	972	ERSAEARGNLTRPPGSGEDC	Homo sapiens
1366	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	973	SRSYRRRESKRKKSFLLC	Homo sapiens
1367	3926	Prostaglandin E2 Receptor	CAB52459.1	974	CRAKATASQSSAQWGR	Homo sapiens

1368	3926	EP3 Prostaglandin E2 Receptor	CAB52459.1	975	KFCQVANAVSSCSNDGQ	Homo sapiens
1369	3927	EP3 Prostaglandin E Receptor	P35408	382	RLSDFRRRSFRRAGAE	Homo sapiens
1370	3927	EP4 Prostaglandin E Receptor	P35408	383	EREVSKNPDLQAIRAS	Homo sapiens
1371	3927	EP4 Prostaglandin E Receptor	P35408	384	DSQRTSSAMSGHSRFSIRE	Homo sapiens
1372	3927	EP4 Prostaglandin E Receptor	P35408	385	RTLRISETSDSSQGQDSE	Homo sapiens
1373	3928	Receptor Prostaglandin F2-alpha	P43088	1046	ILMKAYQRFERQKSKAS	Homo sapiens
1374	3928	Receptor Prostaglandin F2-alpha	P43088	1047	ASDKEWIRFDQSNVLC	Homo sapiens
1375	3928	Receptor Prostaglandin F2-alpha	P43088	1048	TKPIFHSTKITSKHVK	Homo sapiens
1376	3928	Receptor Prostaglandin F2-alpha	P43088	1049	CFYNTEIDKDWEDRFY	Homo sapiens
1377	3928	Receptor Prostaglandin F2-alpha	P43088	1050	RVKFKSQQHRQGRSHLE	Homo sapiens
1378	4051	Proteinase-Activated Receptor 2	AAB47871.1	252	QGTNRSSKGRSLUGKVDGTS	Homo sapiens
1379	4051	Proteinase-Activated Receptor 2	AAB47871.1	253	QRYVWVIVNPMGHSRKKAN	Homo sapiens
1380	4051	Proteinase-Activated Receptor 2	AAB47871.1	255	SHDFRDHAKNALLCRSVR	Homo sapiens
1381	4051	Proteinase-Activated Receptor 2	AAB47871.1	256	VSLTSKKHSRKSSSYS	Homo sapiens
1382	4052	Proteinase-Activated Receptor 3	AAC51218.1	257	ENDTNNLAKPTLPKTFR	Homo sapiens
1383	4052	Proteinase-Activated Receptor 3	AAC51218.1	258	CPEESASHLVKKNATMG	Homo sapiens
1384	4052	Proteinase-Activated Receptor 3	AAC51218.1	260	QPDITTCDDVHNTCESSSP	Homo sapiens
1385	4052	Proteinase-Activated Receptor 3	AAC51218.1	261	MSKTRNHSTAYLTK	Homo sapiens
1386	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	88	RDHKSGETPANVFLMH	Homo sapiens

1387	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	90	RSLRQGLRVEKRLTKAVR	Homo sapiens
1388	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	91	RSHGASCATQIRILANIR	Homo sapiens
1389	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	92	FEGKTNESSLSAKSE	Homo sapiens
1390	4254	Rhodopsin	P08100	1051	RNCMLTICCGKNPLGD	Homo sapiens
1391	4254	Rhodopsin	P08100	1052	CGIDWTLKPEVNNESFVI	Homo sapiens
1392	4254	Rhodopsin	P08100	1053	CWVPYASVAFYIFTHGGSN	Homo sapiens
1393	4254	Rhodopsin	P08100	1055	VLGGFTSLYLSLHG	Homo sapiens
1394	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1042	ATSLLRWPYGSDDC	Homo sapiens
1395	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1043	CTLDYSKGDNRNFTSFL	Homo sapiens
1396	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1044	MEQKLGKSGHLQVNTT	Homo sapiens
1397	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1045	MVCRGIWQCCLSPQKRE	Homo sapiens
1398	4321	Secretin Receptor	P47872	950	CLQLSREGTGDGLGTEQ	Homo sapiens
1399	4321	Secretin Receptor	P47872	951	CPRLRLMLTSRNGSLFRN	Homo sapiens
1400	4321	Secretin Receptor	P47872	952	CGVNVNDSSNEKRHSY	Homo sapiens
1401	4321	Secretin Receptor	P47872	954	KDAVLSSDDVTCDAH	Homo sapiens
1402	4321	Secretin Receptor	P47872	956	MRLKLTQETRGNEVSH	Homo sapiens
1403	4480	Somatostatin Receptor Type 1	P30872	994	EEPGRNASQNGTLESG	Homo sapiens
1404	4480	Somatostatin Receptor Type 1	P30872	996	CLSWMDNAAEEPVDY	Homo sapiens
1405	4480	Somatostatin Receptor Type 1	P30872	997	EDFQPENLESGGVFRNGTC	Homo sapiens
1406	4480	Somatostatin Receptor Type 1	P30872	2616	LSVDAVNMFTSIYC	Homo sapiens
1407	4480	Somatostatin Receptor Type 1	P30872	2618	RAYSVEDFQPENLES	Homo sapiens
1408	4481	Somatostatin Receptor Type 2	P30874	998	RSNQWGRSSCTINWPGE	Homo sapiens
1409	4481	Somatostatin Receptor Type 2	P30874	999	KVKSSGIRVGSSKRKKSE	Homo sapiens
1410	4481	Somatostatin Receptor Type 2	P30874	1000	CLVKVSGTDDGERSDS	Homo sapiens

2	1411	4481	Somatostatin Receptor Type	P30874	1001	KQDKSRLNETTETQRT	Homo sapiens
2	1412	4481	Somatostatin Receptor Type	P30874	2276	DMADEPLNGSHTWLSIP	Homo sapiens
2	1413	4482	Somatostatin Receptor Type	P32745	1002	KVRSAGRRVWAPSCQR	Homo sapiens
3	1414	4482	Somatostatin Receptor Type	P32745	2622	REGGKGKEMNGRVSQI	Homo sapiens
3	1415	4482	Somatostatin Receptor Type	P32745	2624	TTSEPENASSAWPPD	Homo sapiens
3	1416	4482	Somatostatin Receptor Type	P32745	2626	QPGTSGQERPPSRVA	Homo sapiens
3	1417	4483	Somatostatin Receptor Type	P31391	1007	IFADTRPARGGQAVAC	Homo sapiens
4	1418	4483	Somatostatin Receptor Type	P31391	1008	CLLEGAGGAEELDY	Homo sapiens
4	1419	4483	Somatostatin Receptor Type	P31391	2627	KMRAVALRAGWQQRR	Homo sapiens
4	1420	4483	Somatostatin Receptor Type	P31391	2631	CRAVLVDGLNMFTSV	Homo sapiens
4	1421	4483	Somatostatin Receptor Type	P31391	2633	CLVGLVGNALVIFVIL	Homo sapiens
5	1422	4484	Somatostatin Receptor Type	NP_001044.1	2637	SLPLLVFADVQEGGTC	Homo sapiens
5	1423	4484	Somatostatin Receptor Type	NP_001044.1	2638	CLRKGGGAKDADATEP	Homo sapiens
5	1424	4484	Somatostatin Receptor Type	NP_001044.1	2639	RIRQQGEATPPAHRAAA	Homo sapiens
5	1425	4484	Somatostatin Receptor Type	NP_001044.1	2643	RVAKLASAAAWVLSLC	Homo sapiens
	1426	4552	Tachykinin Receptor 1	AAA36641.1	1339	CMIEWPEHPNKIYKV	Homo sapiens
	1427	4552	Tachykinin Receptor 1	AAA36641.1	1340	CPFISAGDYEGLMKSTRYL	Homo sapiens
	1428	4552	Tachykinin Receptor 1	AAA36641.1	1341	KVSRLETITTVVGAHEE	Homo sapiens
	1429	4552	Tachykinin Receptor 1	AAA36641.1	1342	EPEDGPKATPSSDLTSNC	Homo sapiens
	1430	4687	Thrombin Receptor	P25116	1202	EDEEKNESGLTEYRLV	Homo sapiens
	1431	4687	Thrombin Receptor	P25116	2582	AVANIRSKSRALFLSAAVFC	Homo sapiens
	1432	4687	Thrombin Receptor	P25116	2583	SINKSPLQKQLPAFISE	Homo sapiens

1433	4687	Thrombin Receptor	P25116	2621	DPRSFLLRNPNDKYEPFWE	Homo sapiens
1434	4734	Thyrotropin Releasing Hormone Receptor	P34981	1196	PSDPKENSKTWKNDST	Homo sapiens
1435	4734	Thyrotropin Releasing Hormone Receptor	P34981	1197	CFNSTVSSRKQVTKMLA	Homo sapiens
1436	4734	Thyrotropin Releasing Hormone Receptor	P34981	1198	RAAFRKLNCNCKQKXPT	Homo sapiens
1437	4734	Thyrotropin Releasing Hormone Receptor	P34981	1199	KPANYSVVALNYSVIKE	Homo sapiens
1438	4734	Thyrotropin Releasing Hormone Receptor	P34981	1200	KESDHFSTELDDITVTD	Homo sapiens
1439	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1771	EIQKNKPRNDIDFKII	Homo sapiens
1440	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1772	SYRPSDINVSSSTIKPAPC	Homo sapiens
1441	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1773	LNSSTEDGKIRIQDDC	Homo sapiens
1442	4946	Angiotensin II Type 2 Receptor	P50052	1321	CSQKPSDKHLDAIPIL	Homo sapiens
1443	4946	Angiotensin II Type 2 Receptor	P50052	1322	DRYQSIVYFPLSGRRN	Homo sapiens
1444	4946	Angiotensin II Type 2 Receptor	P50052	1323	RKHLLKTSYGNKIRTRD	Homo sapiens
1445	4946	Angiotensin II Type 2 Receptor	P50052	1324	RVPTWLQGKRESMSC	Homo sapiens
1446	5072	Pyrimidinergic Receptor P2Y4	P51582	1142	CHDTRPEEFDHYVHFSSA	Homo sapiens
1447	5072	Pyrimidinergic Receptor P2Y4	P51582	1145	YLLTGDKYRRQLRQLC	Homo sapiens
1448	5072	Pyrimidinergic Receptor P2Y4	P51582	2696	HPURALRWGRPRLAG	Homo sapiens
1449	5072	Pyrimidinergic Receptor P2Y4	P51582	2697	HIITRTVYLARLLEADC	Homo sapiens
1450	5117	Vasopressin V1A Receptor	AAA62271.1	262	REAEALGEGNGPPRDVRNEE	Homo sapiens
1451	5117	Vasopressin V1A Receptor	AAA62271.1	263	NVRGKTASRQSGAEG	Homo sapiens
1452	5117	Vasopressin V1A Receptor	AAA62271.1	264	QNMKEFNKEDTDSMSRRQ	Homo sapiens
1453	5117	Vasopressin V1A Receptor	AAA62271.1	265	RQIFYSNINRSPNTSGMWKD	Homo sapiens
1454	5118	Vasopressin V1B Receptor	AAA65687.1	266	NATPWLGRLDELAKE	Homo sapiens
1455	5118	Vasopressin V1B Receptor	AAA65687.1	267	TRGLPSRVSSINTISPAKIR	Homo sapiens

1456	5118	Vasopressin V1B Receptor	AAA65687.1	268	QPRMRRRLSDGSLSSRH	Homo sapiens
1457	5118	Vasopressin V1B Receptor	AAA65687.1	269	ESPRDLELADGEGTAET	Homo sapiens
1458	5119	Vasopressin V2 Receptor	CAA77746.1	270	SNSSQERPLDTRDPLARAE	Homo sapiens
1459	5119	Vasopressin V2 Receptor	CAA77746.1	271	RHSGSAHWNRPLVLAWAFS	Homo sapiens
1460	5119	Vasopressin V2 Receptor	CAA77746.1	272	CQVLIFREIHASLVPGPSE	Homo sapiens
1461	5119	Vasopressin V2 Receptor	CAA77746.1	273	RGRTPPSLGPQDESC	Homo sapiens
1462	5133	Peropsin	O14718	1147	KNEDGSVFSQTEHNIV	Homo sapiens
1463	5133	Peropsin	O14718	1148	IKYKELRPTNAIILN	Homo sapiens
1464	5133	Peropsin	O14718	1149	RKNDRSFVSYMTVIA	Homo sapiens
1465	5133	Peropsin	O14718	1150	CTESLNRDWDSDQIDVTK	Homo sapiens
1466	5133	Peropsin	O14718	1151	VANKKERRAMLAMFKC	Homo sapiens
1467	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	987	CGPAGRTSSRSQSLRSTDAR	Homo sapiens
1468	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	988	EENRDKWEEAQLAGPN	Homo sapiens
1469	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	989	CRVVDREQEENGDSGG	Homo sapiens
1470	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	990	KRDKAPKSSFVGDGDI	Homo sapiens
1471	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	991	RKLQHAAEKDKEVLGP	Homo sapiens
1472	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	981	CLRPSPEEAVAQAESEVGR	Homo sapiens
1473	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	982	GSSNDLFTTEMRYGEE	Homo sapiens
1474	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	983	MARDGISDKSKQIRAGSERC	Homo sapiens
1475	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	984	EDAPRARPEGTPRRAAK	Homo sapiens
1476	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	985	RSRTMPRTVPGSTMKMGSL	Homo sapiens
1477	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	986	KREKRWSVSSGGAAERSVC	Homo sapiens
1478	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	976	RRVFPTNFPGLQKKGE	Homo sapiens
1479	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	977	CNLTREAKRPPKKEFG	Homo sapiens
1480	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	978	KLKIRAGQMSEPHSGLTKC	Homo sapiens

1481	5521	Inhibitor 3	Brain-Specific Angiogenesis Inhibitor 3	O60242	979	CTDDNLRGADMIVHPQER	Homo sapiens
1482	5521	Inhibitor 3	Brain-Specific Angiogenesis Inhibitor 3	O60242	980	SRSETGSTISMSSLERR	Homo sapiens
1483	6031	SIV/HIV Receptor	BONZO	O00574	1101	NDSSQEEHQDFLQFSK	Homo sapiens
1484	6031	SIV/HIV Receptor	BONZO	O00574	1102	KATKAYNQGAQRMTWG	Homo sapiens
1485	6031	SIV/HIV Receptor	BONZO	O00574	1103	KTLHAGGGFQKHRSLK	Homo sapiens
1486	6031	SIV/HIV Receptor	BONZO	O00574	1104	SLKFRKNFWKLVKDIGC	Homo sapiens
1487	6031	SIV/HIV Receptor	BONZO	O00574	1105	KSSEDNSKTFASASHNV	Homo sapiens
1488	6204	Lysophosphatidic Acid Receptor Edg4	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	66	ERHRVMAVQLHSRLPRGR	Homo sapiens
1489	6204	Lysophosphatidic Acid Receptor Edg4	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	67	RRRVQRMAEHVSHPRVRE	Homo sapiens
1490	6204	Lysophosphatidic Acid Receptor Edg4	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	68	NAAVWSCRDAEMRRFRRR	Homo sapiens
1491	6204	Lysophosphatidic Acid Receptor Edg4	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	69	RQSTRESVHYTSSAQGGAST	Homo sapiens
1492	6213	C-C Chemokine Receptor 5	C-C Chemokine Receptor 5	AAC50598.1	38	YSQYQFWKFNFGTLK	Homo sapiens
1493	6213	C-C Chemokine Receptor 5	C-C Chemokine Receptor 5	AAC50598.1	39	QGAEAPERASSVYTRSTGEQE	Homo sapiens
1494	6213	C-C Chemokine Receptor 5	C-C Chemokine Receptor 5	AAC50598.1	40	RSQKEGLHYTCSHFYSQ	Homo sapiens
1495	6213	C-C Chemokine Receptor 5	C-C Chemokine Receptor 5	AAC50598.1	309	MDYGVSSPIYDINYYTSEPC	Homo sapiens
1496	6363	Chemokine (C-C motif) Receptor-like 2 (CCRL2)	Chemokine (C-C motif) Receptor-like 2 (CCRL2)	O00421	1092	EDEYDVUUEGELESDEAEQC	Homo sapiens
1497	6363	Chemokine (C-C motif) Receptor-like 2 (CCRL2)	Chemokine (C-C motif) Receptor-like 2 (CCRL2)	O00421	1093	KGNFFSARRRVPCGIITSVL	Homo sapiens
1498	6363	Chemokine (C-C motif) Receptor-like 2 (CCRL2)	Chemokine (C-C motif) Receptor-like 2 (CCRL2)	O00421	1094	MRKTLRFREGQRYSLFLVFA	Homo sapiens
1499	6363	Chemokine (C-C motif) Receptor-like 2 (CCRL2)	Chemokine (C-C motif) Receptor-like 2 (CCRL2)	O00421	1096	RSNTPLQPRGQSAQGTGRE	Homo sapiens
1500	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	127	GPGNSARDVLRAPAREEQG	Homo sapiens
1501	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	129	DPGGPRRGNSNIRRVRLKNP	Homo sapiens
1502	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	130	LRQLSKEDLFGSGRAPAERC	Homo sapiens
1503	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	131	PRGAVISGRSQEQSVKTVPG	Homo sapiens
1504	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	1781	CIGKSSVTSDNDNDNEYTE	Homo sapiens
1505	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	NP_005293.1	1806	CIGKSSVTSDNDNDNEYTE	Homo sapiens
1506	6536	Putative Neurotransmitter Receptor (PNR)	Putative Neurotransmitter Receptor (PNR)	O14804	319	TDVVETRLSQWLEEMPC	Homo sapiens

1507	6536	Putative Neurotransmitter Receptor (PNR)	O14804	320	KSLAGAAKHERKAAKT	Homo sapiens
1508	6536	Putative Neurotransmitter Receptor (PNR)	O14804	321	RKALKLTLGKVFSPQIR	Homo sapiens
1509	6536	Putative Neurotransmitter Receptor (PNR)	O14804	485	HPAAFCYQVNGSCPR	Homo sapiens
1510	6777	G Protein-Coupled Receptor TM7SF1	O60478	788	KAKSKYSPPELLKYRLP	Homo sapiens
1511	6777	G Protein-Coupled Receptor TM7SF1	O60478	790	KTGNWERKIVSVRVA	Homo sapiens
1512	6777	G Protein-Coupled Receptor TM7SF1	O60478	791	KSVHSFDYDWYNNVSDQAD	Homo sapiens
1513	6777	G Protein-Coupled Receptor TM7SF1	O60478	792	RVRNPTKDLTNPQMVP	Homo sapiens
1514	6777	G Protein-Coupled Receptor TM7SF1	O60478	793	RYDSDDDLAWNAPQGLQ	Homo sapiens
1515	6853	Purinergic Receptor P2Y11	O43190	865	PTLSFHLKRPQQGAGNC	Homo sapiens
1516	6853	Purinergic Receptor P2Y11	O43190	866	GALGRAVLRSPTGMITVAE	Homo sapiens
1517	6853	Purinergic Receptor P2Y11	O43190	867	MRVLNVDAARRRWSTRC	Homo sapiens
1518	6853	Purinergic Receptor P2Y11	O43190	868	CPGYRDSWNIPEDAKSTGQA	Homo sapiens
1519	6853	Purinergic Receptor P2Y11	O43190	2299	CPANFLAAADDKLSGFQGD	Homo sapiens
1520	6853	Purinergic Receptor P2Y11	O43190	2300	ASNGIALYRFESIRKQR	Homo sapiens
1521	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	137	CNRSSTRHHEQPETSN	Homo sapiens
1522	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	139	PNQIRIRIMAAAKPKHD	Homo sapiens
1523	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	140	EKRLRVHAHSTIDSAR	Homo sapiens
1524	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	141	VQRPLLFASRRQSSARRTEK	Homo sapiens
1525	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	142	QSEAEPPQSKSQSLLESLEP	Homo sapiens
1526	7221	Galanin Receptor GalR2	AAC39634.1	197	NLTVCHPAWSAPRRRAMD	Homo sapiens
1527	7221	Galanin Receptor GalR2	AAC39634.1	198	RAVDPAAGSGARRAKRK	Homo sapiens
1528	7221	Galanin Receptor GalR2	AAC39634.1	199	GRAPGRASGRVCAAAARG	Homo sapiens
1529	7221	Galanin Receptor GalR2	AAC39634.1	200	ERESDILLHMEAAAGALRPC	Homo sapiens
1530	7246	Orexin Receptor 1	AAC39601.1	235	DQLGDLEGLSGEPQP	Homo sapiens
1531	7246	Orexin Receptor 1	AAC39601.1	236	EPSATPGAQMGVPPGSR	Homo sapiens

1532	7246	Orexin Receptor 1	AAC39601.1	237	KRPSDQLGLDLEQGLSGEPQ	Homo sapiens
1533	7246	Orexin Receptor 1	AAC39601.1	239	KAPSPRSSASHKSLSLGSRG	Homo sapiens
1534	7247	Orexin Receptor 2	AAC39602.1	240	SELNETGEPLNPTDYDDEE	Homo sapiens
1535	7247	Orexin Receptor 2	AAC39602.1	241	KWKPLQPVSQPRGPGQ	Homo sapiens
1536	7247	Orexin Receptor 2	AAC39602.1	242	TKSRMSAVAAEIKQIRA	Homo sapiens
1537	7247	Orexin Receptor 2	AAC39602.1	243	RQEDRLTRGRISTESRKS	Homo sapiens
1538	8436	Platelet-Activating Factor Receptor	P25105	1097	AVTRPIKTAQANTRKR	Homo sapiens
1539	8436	Platelet-Activating Factor Receptor	P25105	1098	DSTNTVPDSAGSGNVTRC	Homo sapiens
1540	8436	Platelet-Activating Factor Receptor	P25105	1099	QQRNAEVKRRALWMVC	Homo sapiens
1541	8436	Platelet-Activating Factor Receptor	P25105	1100	KKFRKHLTEKFYSMRSSRKC	Homo sapiens
1542	8509	G Protein-Coupled Receptor Ls8509	Q14439	398	DRYYSVLPLERKMSDAKSR	Homo sapiens
1543	8509	G Protein-Coupled Receptor Ls8509	Q14439	400	DEESEAKEYIGSADFQAKE	Homo sapiens
1544	8509	G Protein-Coupled Receptor Ls8509	Q14439	401	ETRNSKKLLPPLGNITPEE	Homo sapiens
1545	8509	G Protein-Coupled Receptor Ls8509	Q14439	402	ELQIKVPKVGRVERKMSR	Homo sapiens
1546	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1078	KKQRKAGNFTSILIAN	Homo sapiens
1547	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1079	FRNLSLPTDLYTHQVAC	Homo sapiens
1548	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1080	CVENWPSKKDRLLFTT	Homo sapiens
1549	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1081	CLRRRNAKVDDKKENEGR	Homo sapiens
1550	9421	Neuropeptide Y Receptor Type 1	P25929	1064	DEPFQNVTLDAVKDKYVC	Homo sapiens
1551	9421	Neuropeptide Y Receptor Type 1	P25929	1065	CYFKIVIRLKRNNNMMDK	Homo sapiens
1552	9421	Neuropeptide Y Receptor Type 1	P25929	1066	CDFRSRDDDDYETIAMS	Homo sapiens
1553	9421	Neuropeptide Y Receptor Type 1	P25929	1498	ENDDCHLPLAMIFTLALA	Homo sapiens
1554	9421	Neuropeptide Y Receptor Type 1	P25929	2291	SNFSEKNAQLLAFENDDC	Homo sapiens

1555	9834	Type 1 Corticotropin releasing factor Receptor 1	NP_004373.1	1778	CESLSLASNSDNGYRE	Homo sapiens
1556	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	1779	CQEILNEEKSKVHYHVA	Homo sapiens
1557	10457	Frizzled-2	NP_001457.1	1774	NHSEDGAPALLTAPP	Homo sapiens
1558	10457	Frizzled-2	NP_001457.1	1775	GGAPPRVATLEHPFHC	Homo sapiens
1559	10457	Frizzled-2	NP_001457.1	1776	CEPARPDGSMFQSQEE	Homo sapiens
1560	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1082	AAREAGAAVRRPLGPE	Homo sapiens
1561	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1083	LYRRPPREKIGRRRA	Homo sapiens
1562	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1085	PRELAAGQSFHGCLYR	Homo sapiens
1563	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1086	CKTVRLSDVRVRPVNTYAR	Homo sapiens
1564	14198	Interleukin-8 Receptor B	P25025	802	EDFWKGEDLSNYSYS	Homo sapiens
1565	14198	Interleukin-8 Receptor B	P25025	803	PPFLDAAAPCEPESLE	Homo sapiens
1566	14198	Interleukin-8 Receptor B	P25025	804	RRTVSSNVSPACVE	Homo sapiens
1567	14198	Interleukin-8 Receptor B	P25025	805	SKDSLPKDSRPSFVGS	Homo sapiens
1568	14641	Calcitonin Receptor	P30988	766	PKPFLVVGRRKMMDAQYKC	Homo sapiens
1569	14641	Calcitonin Receptor	P30988	769	VEV/PNGELVRRDPVSC	Homo sapiens
1570	14641	Calcitonin Receptor	P30988	771	KIQWNGRWGRPSNRS	Homo sapiens
1571	14641	Calcitonin Receptor	P30988	772	CHQEPNRPANINQGEESAE	Homo sapiens
1572	16041	C-C Chemokine Receptor 6	P51684	355	TKSFRLSRTLPRSKIIC	Homo sapiens
1573	16041	C-C Chemokine Receptor 6	P51684	356	STFVFNQKYNTQGSVDCE	Homo sapiens
1574	16041	C-C Chemokine Receptor 6	P51684	357	TAANLGKMINRSCQSE	Homo sapiens
1575	16041	C-C Chemokine Receptor 6	P51684	358	RYSENISRQTSSETADNDNAS	Homo sapiens
1576	16599	Smoothed	NP_005622.1	2595	CPLAPPELHPPAPAP	Homo sapiens
1577	16599	Smoothed	NP_005622.1	2666	CAIVERERGWPDFLR	Homo sapiens
1578	16599	Smoothed	NP_005622.1	2667	CTNEVQNIKNSSGQ	Homo sapiens
1579	16599	Smoothed	NP_005622.1	2668	CEVPLVRTDNPKSWYE	Homo sapiens
1580	16599	Smoothed	NP_005622.1	2669	CRADGTMRIGEPSNE	Homo sapiens

1581	16599	Smoothed	NP_005622.1	2670	EAESELPQRLGRKK	Homo sapiens
1582	16599	Smoothed	NP_005622.1	2671	ANVTIGLPTKQIPDC	Homo sapiens
1583	17250	G Protein-Coupled Receptor GPR45	O43898	1227	SNASDSGSGQLPAPLR	Homo sapiens
1584	17250	G Protein-Coupled Receptor GPR45	O43898	1228	CVLGYTELPADRAYVV	Homo sapiens
1585	17250	G Protein-Coupled Receptor GPR45	O43898	1249	LNTVRKNAVVRVHNSD	Homo sapiens
1586	17250	G Protein-Coupled Receptor GPR45	O43898	1272	KVPERIRRRIGPSTVVC	Homo sapiens
1587	17250	G Protein-Coupled Receptor GPR45	O43898	1273	DSLRLQLTRAGLRRL	Homo sapiens
1588	17345	G Protein-Coupled Receptor D6	LR13	363	EDADAENSSFVYDYLDE	Homo sapiens
1589	17345	G Protein-Coupled Receptor D6	LR13	364	DKYLEIVHAQPYHRLTR	Homo sapiens
1590	17345	G Protein-Coupled Receptor D6	LR13	365	CVLVRLRPAGQGGRALK	Homo sapiens
1591	17345	G Protein-Coupled Receptor D6	LR13	366	DLGERQSENYPNKEDVGNK	Homo sapiens
1592	17535	Gaba(b) Receptor 1	O95375	188	EKLTKRLKRHPEETGFGSEA	Homo sapiens
1593	17535	Gaba(b) Receptor 1	O95375	189	KKEEKKEWRKTLPEWK	Homo sapiens
1594	17535	Gaba(b) Receptor 1	O95375	190	DPLHRTIETFAKEEKEDID	Homo sapiens
1595	17535	Gaba(b) Receptor 1	O95375	191	YEIEVCRGEREVVGPVVRK	Homo sapiens
1596	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1205	SLWETVQKWREYRRQC	Homo sapiens
1597	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1206	LQKDNSSLPWDRDISEC	Homo sapiens
1598	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1208	CIVWSKLKANLMCKTD	Homo sapiens
1599	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1209	RWRLEHLHIQRDSSMKPLKC	Homo sapiens
1600	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1520	CQVDETEEPDVHLPPQ	Homo sapiens
1601	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1521	REGLEAAGAAGASAAVSS	Homo sapiens
1602	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1522	KLPSARAKIRITSSPI	Homo sapiens
1603	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1523	ESKSSIKRVLAITTVLS	Homo sapiens

1604	18471	Receptor LOC51210 G Protein-Coupled	NP_057456.1	1524	QGTEILYPDAHLAED	Homo sapiens
1605	18471	Receptor LOC51210 G Protein-Coupled	NP_057456.1	1525	PKTPLKERISLPSSRS	Homo sapiens
1606	19072	Receptor LOC51210 G Protein-Coupled	ENSP00000164265	2030	SVVQLRRQRDPFEWNEGLC	Homo sapiens
1607	19072	Receptor Ls19072 G Protein-Coupled	ENSP00000164265	2032	PAVGWHDTSERFVTHGC	Homo sapiens
1608	19072	Receptor Ls19072 G Protein-Coupled	ENSP00000164265	2047	AVQVGRQADRRRAFTVPT	Homo sapiens
1609	19501	Receptor Ls19072 G Protein-Coupled	Q9UIZ3	1513	EHEPAGEEALRQKRAVATK	Homo sapiens
1610	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1514	ALRQKRAVATKSPAE	Homo sapiens
1611	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1515	CEKEVLSSNVSWRYEEQQLE	Homo sapiens
1612	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1518	RLANNTGGWDSSGCVVEEGD	Homo sapiens
1613	19501	Receptor KIAA0758 G Protein-Coupled	Q9UIZ3	1519	CKQEKSLFQISKISG	Homo sapiens
1614	21632	Receptor KIAA0758 G Protein-Coupled	BAA96055.1	2164	CTAFQIRREGGVPGTRPGSPG	Homo sapiens
1615	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2166	APGTRASRRCDRAGRWE	Homo sapiens
1616	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2167	CPAERVANNRGDFRWPR	Homo sapiens
1617	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2171	QNPPEPEPPADGQLRFRC	Homo sapiens
1618	21632	Receptor Ls21632 G Protein-Coupled	BAA96055.1	2175	VPLGGGAPGTRASRRC	Homo sapiens
1619	22315	Receptor Ls21632 G Protein-Coupled	LR29	425	PAARVHRPSRCRYRD	Homo sapiens
1620	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	426	TLARPDATGSQRRRKTVRL	Homo sapiens
1621	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	427	RSKLVAASVPARDVRG	Homo sapiens
1622	22315	Receptor GPR92/GPR93 G Protein-Coupled	LR29	428	AQSERSAVTTDATRPD	Homo sapiens

1623	22925	Latrophilin-3	O94867	1138	CSGKSTESSIGSGKTSISR	Homo sapiens
1624	22925	Latrophilin-3	O94867	1140	ENHQPHHYTRRRIPQD	Homo sapiens
1625	22925	Latrophilin-3	O94867	1141	ESVTSTQTEPPAKC	Homo sapiens
1626	22925	Latrophilin-3	O94867	1497	SSASLNREGLLNNARD	Homo sapiens
1627	25359	G Protein-Coupled Receptor GPR34	O95853	1255	DRYKINRSIQQRKAIT	Homo sapiens
1628	25359	G Protein-Coupled Receptor GPR34	O95853	1257	CFHYRDKHNAKGEAIFN	Homo sapiens
1629	25359	G Protein-Coupled Receptor GPR34	O95853	1258	RISKRRSKFPNSGKYA	Homo sapiens
1630	25359	G Protein-Coupled Receptor GPR34	O95853	1259	CQLLRRRFQGEPSRSESTSE	Homo sapiens
1631	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2721	RLQEILLTEKINKTR	Homo sapiens
1632	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2722	KGKSRAAENASLGPTN	Homo sapiens
1633	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2723	LLFGTIMDHKIRDAUR	Homo sapiens
1634	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2724	RPSIGSSKSDVVIIMRI	Homo sapiens
1635	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1579	KLPNNELHGQESHNSGN	Homo sapiens
1636	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1580	SGNIRSDGPGKNITLHNEFD	Homo sapiens
1637	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1581	RQFISQSSRRKRKHNGSIR	Homo sapiens
1638	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1582	SHLDRLDESQAQKILYYC	Homo sapiens
1639	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1584	CRSFSRRLFKKSNIRTRSE	Homo sapiens
1640	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1585	ESIRSLQSVRRSEVRIVYD	Homo sapiens
1641	31568	G Protein-Coupled Receptor RE2	O75963	331	CRKELSNLIEEGGEGGV	Homo sapiens
1642	31568	G Protein-Coupled Receptor RE2	O75963	332	EEDAQRITGRKINSSTSTSS	Homo sapiens
1643	31568	G Protein-Coupled Receptor RE2	O75963	333	CFGDRYREPFVQRQRTSR	Homo sapiens
1644	31568	G Protein-Coupled Receptor RE2	O75963	334	HSSSTGDTGFCSQDSGNL	Homo sapiens

1645	36534	Receptor RE2 G Protein-Coupled Receptor GPR49	O75473	1232	CQKLQKIDLRHNEYEIKVD	Homo sapiens
1646	36534	G Protein-Coupled Receptor GPR49	O75473	1233	NKGDNSSMDDLHKKDA	Homo sapiens
1647	36534	G Protein-Coupled Receptor GPR49	O75473	1234	QDERDLEDLLDFEED	Homo sapiens
1648	36534	G Protein-Coupled Receptor GPR49	O75473	1235	ERGFVSIVYSAKFETKA	Homo sapiens
1649	36534	G Protein-Coupled Receptor GPR49	O75473	1236	RSKHPSLMSINSDDVEKQSC	Homo sapiens
1650	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2597	DAQKESTGVTLRQRR	Homo sapiens
1651	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2600	CKKINQLISETEAVVTN	Homo sapiens
1652	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2610	ADDQTLLEQMMDQDDG	Homo sapiens
1653	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2672	KYNGSISLRPRLASQ	Homo sapiens
1654	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2673	KRYFAKEEFKFTQC	Homo sapiens
1655	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2674	DGDRQKAMKRLRPPL	Homo sapiens
1656	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2103	RVRSGRVRVSSTRDFQDC	Homo sapiens
1657	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2105	CNNSVPGKEHPDITVMIRE	Homo sapiens
1658	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2106	APSKPGLPKPGATVPRKVD	Homo sapiens
1659	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2135	AASKPKSTPAVIGGPGSKD	Homo sapiens
1660	42697	G Protein-Coupled Receptor GPR64	O00406	1261	KRSELNKTLLTSETVFIMC	Homo sapiens
1661	42697	G Protein-Coupled Receptor GPR64	O00406	1262	GNASTERNGVSFVQNGDVC	Homo sapiens
1662	42697	G Protein-Coupled Receptor GPR64	O00406	1263	CRKKKKQLGAGRKTSIQD	Homo sapiens
1663	42697	G Protein-Coupled Receptor GPR64	O00406	1264	DFTGKQHMIFNEKEDSC	Homo sapiens

1664	45937	KIAA1624 Protein	AAK57695	2072	PNVNPASAGNQTKTQD	Homo sapiens
1665	45937	KIAA1624 Protein	AAK57695	2073	RVKSPPEAGTQLPKIIFS	Homo sapiens
1666	45937	KIAA1624 Protein	AAK57695	2074	KDGYMNVNVSLSLNEPED	Homo sapiens
1667	45937	KIAA1624 Protein	AAK57695	2076	RSTVDSKAMGEKSFVHNING	Homo sapiens
1668	50847	Neurotensin Receptor type 2	O95665	1265	CQPLRARSLLIPRRTR	Homo sapiens
1669	50847	Neurotensin Receptor type 2	O95665	1266	GQKHELETADGPEPEASRVC	Homo sapiens
1670	50847	Neurotensin Receptor type 2	O95665	1267	KKTFIQGGQVSLVRHKD	Homo sapiens
1671	50847	Neurotensin Receptor type 2	O95665	1269	CGEHHPMKRLPPKPQSP	Homo sapiens
1672	50847	Neurotensin Receptor type 2	O95665	2294	STSTPGSSTPSRLELSEE	Homo sapiens
1673	50847	Neurotensin Receptor type 2	O95665	2301	METSSPRPRPSSNPG	Homo sapiens
1674	50847	Neurotensin Receptor type 2	O95665	2302	CSQVPSTSTPGSSTPSR	Homo sapiens
1675	53440	G Protein-Coupled Receptor LS53440	LR76	1850	DPNGNESSATYFIUG	Homo sapiens
1676	53440	G Protein-Coupled Receptor LS53440	LR76	1851	RHATVLTLPRTKIGV	Homo sapiens
1677	53440	G Protein-Coupled Receptor LS53440	LR76	1852	ILKTVLGLTREAAQAKA	Homo sapiens
1678	53440	G Protein-Coupled Receptor LS53440	LR76	1853	HREFSKRDSPLPVILAN	Homo sapiens
1679	53440	G Protein-Coupled Receptor LS53440	LR76	1854	KEIRQRILRLHFVATHASE	Homo sapiens
1680	54053	Gaba(b) Receptor 2	O75899	1416	GEDIESDTESFNDPC	Homo sapiens
1681	54053	Gaba(b) Receptor 2	O75899	1417	SSKQIKTISGKTPQQYE	Homo sapiens
1682	54053	Gaba(b) Receptor 2	O75899	1419	AATQINRRFQFTGNQKKE	Homo sapiens
1683	54053	Gaba(b) Receptor 2	O75899	1420	CKDPEDINSPEHIQRR	Homo sapiens
1684	55728	ETL protein	NP_071442.1	2113	CVLSRKIQEEYVRLFKNVV	Homo sapiens
1685	55728	ETL protein	NP_071442.1	2114	CIAANINKTLTKRSKEP	Homo sapiens
1686	55728	ETL protein	NP_071442.1	2115	KLSVNHRRHTLTKLMTVE	Homo sapiens
1687	55728	ETL protein	NP_071442.1	2116	EKITFTLSHRKVTDVRPSLC	Homo sapiens
1688	55728	ETL protein	NP_071442.1	2117	SSSLGYNNTISAKD	Homo sapiens
1689	56923	Muscarinic acetylcholine	P20309	1421	CSSVELQQQSMKRSNRRK	Homo sapiens

1690	56923	Receptor M3	P20309	1422	KPSSEQMDQDHSSSDSWNNN	Homo sapiens
1691	56923	Muscarinic acetylcholine Receptor M3	P20309	1423	DLERKADKLGAQKQSV	Homo sapiens
1692	56923	Muscarinic acetylcholine Receptor M3	P20309	1424	KEATLAKRFALKTRSQ	Homo sapiens
1693	57180	Receptor M3	NP_062813.1	2097	PPTCRPRRMVSVYRPPGNE	Homo sapiens
1694	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2098	CLAVTRPFLAPRLRSPALAIR	Homo sapiens
1695	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2099	RGARWGSGRHGARGVR	Homo sapiens
1696	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2100	TAGDLLPRAGPRFLTR	Homo sapiens
1697	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2101	EGSGEARGGGRSREGTIME	Homo sapiens
1698	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2102	RTTPQLKVVGGQGRNGD	Homo sapiens
1699	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1909	RSAPTALSRRLRARTHLPGC	Homo sapiens
1700	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1910	VRGSHGEPDASLMPRSC	Homo sapiens
1701	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1911	RKEDSVLMEATSGGPTSF	Homo sapiens
1702	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1912	DQNKADIGGMPLGLTVRSV	Homo sapiens
1703	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1913	PAGWPDQSLAESDSEDPG	Homo sapiens
1704	74514	5-HT5A Receptor	NP_076917.1	2118	ETNHSLGKDDLRPSSP	Homo sapiens
1705	74514	5-HT5A Receptor	NP_076917.1	2119	SLVHELGGRRWQLGRRILC	Homo sapiens
1706	74514	5-HT5A Receptor	NP_076917.1	2120	LLFGWGETVSEGSEC	Homo sapiens
1707	74514	5-HT5A Receptor	NP_076917.1	2121	FRVGSRKINSVSPISE	Homo sapiens
1708	74514	5-HT5A Receptor	NP_076917.1	2122	RHATVTFQPEGDTWREQK	Homo sapiens

1709	81765	Thromboxane A2 Receptor	P21731	1277	GITRPFSPAVASQRR	Homo sapiens
1710	81765	Thromboxane A2 Receptor	P21731	1278	CHVYHGQEAAGQRRPDSEVE	Homo sapiens
1711	81765	Thromboxane A2 Receptor	P21731	1279	RNPAMSPAGQLSRTE	Homo sapiens
1712	81765	Thromboxane A2 Receptor	P21731	1280	RRLQPRLSRPRRVS LC	Homo sapiens
1713	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	155	RYLSVVSPLSTLRVPTLRC	Homo sapiens
1714	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	156	SSILDTFHKLSSGCDYSE	Homo sapiens
1715	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	157	VEILTFLRSRSKRRHRTVK	Homo sapiens
1716	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	158	QTLFRTQIIRSCFAKQGLE	Homo sapiens
1717	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	159	RLQAPSPASIPHSPGAFAYE	Homo sapiens
1718	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1589	RIEPVSYNSSPSQEE	Homo sapiens
1719	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1590	IMIAQTLRKNAQVRKC	Homo sapiens
1720	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1591	RNQNVNKLQHVQTRGYTKS	Homo sapiens
1721	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1592	SRLQLVSAINLSTAKD	Homo sapiens
1722	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1593	CKQKTRLRAMGKGNLEVNIR	Homo sapiens
1723	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1594	NSAYMLSPKPKQKKFVDQAC	Homo sapiens
1724	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1218	CKVQDSNRRKMILPTGF	Homo sapiens
1725	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1219	HAVSLTKLVRGRKPLS	Homo sapiens
1726	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1220	NVNVFELSAPRRNED	Homo sapiens
1727	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1221	TKQRNPMIDYPVEDAFC	Homo sapiens
1728	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1222	CKPQLVKSYGVENRA	Homo sapiens
1729	152198	Tachykinin Receptor 2	AAB05897.1	1286	RRAVPGHGQAHGANLRH.	Homo sapiens
1730	152198	Tachykinin Receptor 2	AAB05897.1	1287	KEDKLELTPTLSLRVNRC	Homo sapiens
1731	152198	Tachykinin Receptor 2	AAB05897.1	1288	KETLFMAGDITAPSEATSGEA	Homo sapiens

1732	152198	Tachykinin Receptor 2	AAB05897.1	1290	CVVAWPEDSGGKTLIL	Homo sapiens
1733	152201	Thyrotropin Receptor	P16473	1445	RQRKSVNALNSPLHQE	Homo sapiens
1734	152201	Thyrotropin Receptor	P16473	1446	KFGDTHNNAHYVVFEEQED	Homo sapiens
1735	152201	Thyrotropin Receptor	P16473	1449	CHKVITV/RNPQYNPGDK	Homo sapiens
1736	152201	Thyrotropin Receptor	P16473	1450	CKRQAQAYRGQRVPKKNSTD	Homo sapiens
1737	152245	C-C Chemokine Receptor 2	NP_000639.1	1896	SPSRFRINTNESGEEVTT	Homo sapiens
1738	152245	C-C Chemokine Receptor 2	NP_000639.1	1898	CQKEDSVV/CGPYFRGWNN	Homo sapiens
1739	152245	C-C Chemokine Receptor 2	NP_000639.1	1899	SGEEVITFFDYDYGAPCHKF	Homo sapiens
1740	152299	Interleukin-8 Receptor A	P25024	806	DFDDLFTGMPPADEDYSPC	Homo sapiens
1741	152299	Interleukin-8 Receptor A	P25024	807	CWGLSMNLSLFFLFRQAYH	Homo sapiens
1742	152299	Interleukin-8 Receptor A	P25024	808	RHRVTSYTSSSVNVSSN	Homo sapiens
1743	152299	Interleukin-8 Receptor A	P25024	1490	CMLETILNKYVVIAYALV	Homo sapiens
1744	158822	Mas Proto-Oncogene	NP_002368.1	1527	EEPTNISTGRNASVGNHRQ	Homo sapiens
1745	158822	Mas Proto-Oncogene	NP_002368.1	1528	RRNPFTVITHLSIAD	Homo sapiens
1746	158822	Mas Proto-Oncogene	NP_002368.1	1529	YVMCIDREEESHNRNDCRAV	Homo sapiens
1747	158822	Mas Proto-Oncogene	NP_002368.1	1530	SSTILVV/KIRKNTWASHSK	Homo sapiens
1748	158822	Mas Proto-Oncogene	NP_002368.1	1531	TRAFKDEMQPRRQKDNIC	Homo sapiens
1749	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1578	ERYLGVAFPVQYKLSRRLP	Homo sapiens
1750	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1586	QYLNTTEQVRSNGNEITC	Homo sapiens
1751	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1588	EGTINEDRGVGGGEGMPSSD	Homo sapiens
1752	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1616	RGLQVLNRNQGSLLGRRGKD	Homo sapiens
1753	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1292	KQCLEEAQLENETIGCS	Homo sapiens
1754	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1296	KDLALFDGSGESDQCSE	Homo sapiens
1755	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1297	LQKLRPPDIRKSDSSP	Homo sapiens
1756	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1298	NPKYRHPGSGSNGATC	Homo sapiens
1757	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1299	KVFSNFYSKAGNISKNC	Homo sapiens
1758	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1301	CGYSDPEDESKITFYI	Homo sapiens
1759	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1305	KRKWRSRCPTPSASRD	Homo sapiens

1760	160040	Polypeptide Receptor 2 Vasoactive Intestinal Polypeptide Receptor 2	P41587	1306	CGSSFSRNGSEGAHQHR	Homo sapiens
1761	160055	Motilin Receptor (GPR38)	AAC26081.1	132	REPPWPALPPCDERRCS	Homo sapiens
1762	160055	Motilin Receptor (GPR38)	AAC26081.1	134	SPSPGPETAEEAAALFSREC	Homo sapiens
1763	160055	Motilin Receptor (GPR38)	AAC26081.1	135	SSRRPLRGPAASGRERGHQ	Homo sapiens
1764	160055	Motilin Receptor (GPR38)	AAC26081.1	136	RKSRPRGFHRSRTAG	Homo sapiens
1765	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1595	NPLVTGYLGRGPGLKTV	Homo sapiens
1766	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1596	GRYLGAAPFLGYQAFRRPC	Homo sapiens
1767	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1597	CLEAWDPASAGPARFS	Homo sapiens
1768	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1598	CLRALARSGLTHRRKLR	Homo sapiens
1769	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1599	NASNVASFLYPNLGGSWRK	Homo sapiens
1770	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1617	TVSLPLKAVEALASGA	Homo sapiens
1771	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1618	DHSNTSLGINTPVNGSPVC	Homo sapiens
1772	160189	G Protein-Coupled Receptor GPR54	BAB55446	1926	CSEAFSPRALERAFALY	Homo sapiens
1773	160189	G Protein-Coupled Receptor GPR54	BAB55446	1927	ERAGAVRAKVSRLLVAAW	Homo sapiens
1774	160189	G Protein-Coupled Receptor GPR54	BAB55446	1928	RRPGSPDPAAPHAEHLRLGS	Homo sapiens
1775	160189	G Protein-Coupled Receptor GPR54	BAB55446	1929	GAPANASGCPGCCGANASD	Homo sapiens
1776	160202	Adrenomedullin Receptor (ADMR)	O15218	390	DLFNHTLSECHVELSQST	Homo sapiens
1777	160202	Adrenomedullin Receptor (ADMR)	O15218	391	NVLTACRLRGPGQPKSRRH	Homo sapiens
1778	160202	Adrenomedullin Receptor (ADMR)	O15218	392	KDQTKAGTCASSSSCSTQ	Homo sapiens
1779	160202	Adrenomedullin Receptor (ADMR)	O15218	484	KGDSQPAAPAAAPHIPEPSLS	Homo sapiens
1780	160204	G Protein-Coupled Receptor RTA	LR85	1977	CRARRRQRSTKLNHVILA	Homo sapiens

1781	160204	G Protein-Coupled Receptor RTA	LR85	1983	CPGLSEAPELYRRGFLTIEQ	Homo sapiens
1782	160204	G Protein-Coupled Receptor RTA	LR85	1985	RDGAELGEAGGSTPNVT	Homo sapiens
1783	160204	G Protein-Coupled Receptor RTA	LR85	2173	LAGRDKSQRLWEPLRV	Homo sapiens
1784	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1678	RTTRKWNNGCTHCYLA FNDS	Homo sapiens
1785	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1679	RAKLLREGVWVHANRPKR	Homo sapiens
1786	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1680	RRVMIKNIYHPRMLLI	Homo sapiens
1787	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1682	SALARAFGEEEFLSSC	Homo sapiens
1788	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1683	RSCSRKMNSSGCLSEE	Homo sapiens
1789	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	151	PGPDRDATCNSRQAALAVSK	Homo sapiens
1790	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	152	SSHAAVSLRLQHRGRRPGR	Homo sapiens
1791	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	153	DDSELGGAGSSRRRTSSIA	Homo sapiens
1792	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	154	DGPPEPGAEOHLEPGPRR	Homo sapiens
1793	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2220	CPILEQMSRLQSHNTSIRY	Homo sapiens
1794	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2221	RYIDHAAVLLHGLASLLGLV	Homo sapiens
1795	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2222	CRMRTQTVVTWV/LHLASDL	Homo sapiens
1796	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2223	SASLPFFTVFLAV/GHSWE	Homo sapiens
1797	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2224	CLVLWALAVLNTVPYVFRD	Homo sapiens
1798	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2225	CYNNVLLNPGPDRDAT	Homo sapiens
1799	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2226	CNSRGAALAVSKFLAFLVP	Homo sapiens
1800	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2228	RGLPFVTSIAFFNSVANPVL	Homo sapiens

1801	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2229	CSRPEPRGRPARLLGWILLGS	Homo sapiens
1802	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2230	CAASPQTGLPLNRALSS	Homo sapiens
1803	160212	Receptor GPR44 (CRTH2) G Protein-Coupled	Q9Y2T5	444	KEINDRRAFRPSHEVDSSRE	Homo sapiens
1804	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	445	CVKDQEAQEPKPRKRANS	Homo sapiens
1805	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	446	RWTEWRILNMSSGIVNASER	Homo sapiens
1806	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	622	HSCPLGFGHYSVVDVCIFE	Homo sapiens
1807	160217	Receptor GPR52 G Protein-Coupled	AAD22410.1	161	GKVEKVMCFHNMSSDDTWSAK	Homo sapiens
1808	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	162	RSIHILLGRRDHTQDWVQQIK	Homo sapiens
1809	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	163	CRAKQSISFLLQLSM	Homo sapiens
1810	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	164	KEFRMINRAHRPSRVQLVLQ	Homo sapiens
1811	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	2	AQRPTDVGGAEATRKAAR	Homo sapiens
1812	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	3	KEFQEASALAVAPRAKAHK	Homo sapiens
1813	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	123	GGFCFRSTRHNFNSMR	Homo sapiens
1814	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	125	ETIRRALYTSKLSDANC	Homo sapiens
1815	160221	Receptor GPR27 G Protein-Coupled	LR6	335	FPVLDGGGDDDEDAPCALEQ	Homo sapiens
1816	160221	Receptor GPR27 G Protein-Coupled	LR6	338	RGARRLLVLEEFKTEKRLC	Homo sapiens
1817	160221	Receptor GPR27 G Protein-Coupled	LR6	496	NASEPGSGSGGGEAAALGLK	Homo sapiens
1818	160221	Receptor GPR27 G Protein-Coupled	O54897	515	GLRALACLPAVMMLAARRA	Mus musculus
1819	160221	Receptor GPR27 G Protein-Coupled	LR6	1291	RPAGPGRGARRLVLE	Homo sapiens

1820	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1606	CQRPPKQEDGQSPV	Homo sapiens
1821	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1607	CNIMGDTVTEQYFALRRK	Homo sapiens
1822	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1610	EGRADQSAEAAALAVP	Homo sapiens
1823	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1611	QNFVGRRRYGAEQNPTVK	Homo sapiens
1824	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1600	RIFRSIKQSMGLSAAQKAK	Homo sapiens
1825	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1601	CDRFVAVVYALSRGRR	Homo sapiens
1826	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1604	ATDHSRQEVSRHKGWKE	Homo sapiens
1827	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1605	KTDVTRLTHSRDTEELQS	Homo sapiens
1828	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	403	ETQEQQSRSKRGTEDEEAK	Homo sapiens
1829	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	404	SPNPDKDGITPDSGGELR	Homo sapiens
1830	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	405	CQLVTWRVRGPPGRKSE	Homo sapiens
1831	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	406	AANGSDNKLKTEVSS	Homo sapiens
1832	160225	Spingolipid Receptor Edg6	CAA04118.1	70	PRDSFRGSRSLSRMIRE	Homo sapiens
1833	160225	Spingolipid Receptor Edg6	CAA04118.1	71	ERFATMVRPVAESGATKTSR	Homo sapiens
1834	160225	Spingolipid Receptor Edg6	CAA04118.1	72	RLVQASGGQKAPRPAAR	Homo sapiens
1835	160225	Spingolipid Receptor Edg6	CAA04118.1	73	RAVEAHSGASTDSSLRPRD	Homo sapiens
1836	160225	Spingolipid Receptor Edg6	CAA04118.1	1914	IFRLVQASGGQKAPRPAAR	Homo sapiens
1837	160225	Spingolipid Receptor Edg6	CAA04118.1	1915	DSSLRPRDSFRGSRSLSRM	Homo sapiens
1838	160225	Spingolipid Receptor Edg6	CAA04118.1	1916	RSLSFRMREPLSSISVR	Homo sapiens
1839	160225	Spingolipid Receptor Edg6	CAA04118.1	1917	GPEDGGGLGALRGLSVAASC	Homo sapiens
1840	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1625	ANIGSLCVSFLQPKKE	Homo sapiens
1841	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1626	ETIFNAVMLWEDETVE	Homo sapiens
1842	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1627	CNRKVYQAVRHINKATENKE	Homo sapiens

1843	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1628	CILEHAVNFEDHNSGKR	Homo sapiens
1844	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1629	CNTSQQRKRLSVSTKD	Homo sapiens
1845	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	2303	CDAEKSNFLCYDYKPLEK	Homo sapiens
1846	160300	Encephalopsin	NP_055137.1	2131	CTVDWKSKDANDSSFV	Homo sapiens
1847	160300	Encephalopsin	NP_055137.1	2132	CVEDLQTIQVIKLYEK	Homo sapiens
1848	160300	Encephalopsin	NP_055137.1	2133	CQRPADLPAAAGSEMQRIP	Homo sapiens
1849	160300	Encephalopsin	NP_055137.1	2134	TSDESLSVDDSDKTIG	Homo sapiens
1850	160312	Spingolipid Receptor Edg5	O95136	1018	ERHVAIAKVKLYGSDKSC	Homo sapiens
1851	160312	Spingolipid Receptor Edg5	O95136	1019	PSRDLRREVLRPLQC	Homo sapiens
1852	160312	Spingolipid Receptor Edg5	O95136	1020	QEHYNYTKETLETQET	Homo sapiens
1853	160312	Spingolipid Receptor Edg5	O95136	1021	GRRRVGTPGHLLPLR	Homo sapiens
1854	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1922	MMRKAKFSLRENPVETKG	Homo sapiens
1855	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1923	MMIEYSNFEKEYDDVTIKM	Homo sapiens
1856	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1924	CEQTEEEKKLRHLALRSE	Homo sapiens
1857	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1925	KKRVGDGGSVLRTHGKEMSK	Homo sapiens
1858	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	463	DRARRRFHFMNEKWDINSSE	Homo sapiens
1859	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	464	RKNQEGWHVVSRRKQKIHK	Homo sapiens
1860	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	465	RKSAEKPGQELVMEELKE	Homo sapiens
1861	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	500	RQSAGDRRLGLSRQTAK	Homo sapiens
1862	160324	G Protein-Coupled Receptor	NP_076403.1	1619	DRFLKIIRPLRNIFLKKP	Homo sapiens
1863	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1620	MILSNKEATPSSVKKC	Homo sapiens
1864	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1622	VVDSYRKSCKDRKNIN	Homo sapiens
1865	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1623	ARVPYTHSQTNKNTDC	Homo sapiens

1866	160324	G Protein-Coupled Receptor	NP_076403.1	1624	CMQGRKTTASSQENHSSQTD	Homo sapiens
1867	160329	GPR86/GPR94/P2Y13 Proteinase-Activated Receptor 4	O76067	1308	CANDSDTLELPDSSRA	Homo sapiens
1868	160329	Proteinase-Activated Receptor 4	O76067	1309	PLRARALRGRRRLALGLC	Homo sapiens
1869	160329	Proteinase-Activated Receptor 4	O76067	1310	LQRQIFRLARSDRVLC	Homo sapiens
1870	160329	Proteinase-Activated Receptor 4	O76067	1311	RDKVRAGLFQRRSPGDT	Homo sapiens
1871	160330	G Protein-Coupled- Receptor TM7XN1/GPR56	Q9Y653	1213	CELKRDQLQLLSQFLKHPQK	Homo sapiens
1872	160330	G Protein-Coupled- Receptor TM7XN1/GPR56	Q9Y653	1214	TSVRFMGDMVSEEDR	Homo sapiens
1873	160330	G Protein-Coupled- Receptor TM7XN1/GPR56	Q9Y653	1215	RQEEEQSEIMEYSVLLP	Homo sapiens
1874	160330	G Protein-Coupled- Receptor TM7XN1/GPR56	Q9Y653	1216	RTLQRTKGRSGAEKR	Homo sapiens
1875	160387	Glucagon-Like Peptide 2 Receptor	O95838	1312	GSLLLETRKWAAQYKQAC	Homo sapiens
1876	160387	Glucagon-Like Peptide 2 Receptor	O95838	1313	QTIENATDIWQDDSEC	Homo sapiens
1877	160387	Glucagon-Like Peptide 2 Receptor	O95838	1315	CPKKLSEGDGAEKLRK	Homo sapiens
1878	160387	Glucagon-Like Peptide 2 Receptor	O95838	1316	QQDHARWPRGSSLSEC	Homo sapiens
1879	160388	Latrophilin-1	O94910	1121	EPTSTHSEHQSGAWC	Homo sapiens
1880	160388	Latrophilin-1	O94910	1126	CEPREVRRVQWPATQQ	Homo sapiens
1881	160388	Latrophilin-1	O94910	1129	RSQDFPPGDGGPEPPR	Homo sapiens
1882	160388	Latrophilin-1	O94910	1131	CTAEDGATSRPLSSPPGRDS	Homo sapiens
1883	160388	Latrophilin-1	O94910	1706	RESAGKNYNKMHKRETC	Homo sapiens
1884	160388	Latrophilin-1	O94910	1707	RDSFVPSDSSPEGPSEALP	Homo sapiens
1885	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1938	QVGPCRSLSRGRGSSGAC	Homo sapiens
1886	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1939	CRDAGTELTGHLVPHHDGLR	Homo sapiens

1887	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1940	CKLAQAPGLRAGERSPEESL	Homo sapiens
1888	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1942	RVSDTPEGVNSLDPHGES	Homo sapiens
1889	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1943	RSQKSPQSVIPFLREES	Homo sapiens
1890	160397	Latrophilin-2	O95490	1132	CEALDSKGIKWPQTQR	Homo sapiens
1891	160397	Latrophilin-2	O95490	1133	DILDAQLQELKPSEKD	Homo sapiens
1892	160397	Latrophilin-2	O95490	1136	RTHSLLYGPQKKVKSE	Homo sapiens
1893	160397	Latrophilin-2	O95490	1137	RDSYPESPDMEDL	Homo sapiens
1894	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1630	CQEQKMLRTLDLSYNIIRD	Homo sapiens
1895	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1631	CDSYANLNTEDNSLQD	Homo sapiens
1896	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1632	KGTADAANVTSTLENEE	Homo sapiens
1897	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1633	ERSLSAKDIMKNGKSNHLK	Homo sapiens
1898	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1634	CNLEKEDLSENSQSSMIK	Homo sapiens
1899	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1635	KRRVTKSGSVSVSIS	Homo sapiens
1900	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1636	CGTQSAHSDYADEEDS	Homo sapiens
1901	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1637	DEEDSFVSDSSDQVQAC	Homo sapiens
1902	160435	LS160435 Receptor	LR80	1918	ATILKLRTEAHGREQRR	Homo sapiens
1903	160435	LS160435 Receptor	LR80	1919	CRRVPRDITLDRRESLFSAR	Homo sapiens
1904	160435	LS160435 Receptor	LR80	1920	PLSSKRWRRRYAVAAC	Homo sapiens
1905	160435	LS160435 Receptor	LR80	1921	CRRMGPRSPSVIFMINL	Homo sapiens
1906	160889	Platelet Activating Receptor Homolog (H963)	O14626	1223	MIMPIKDIKESNVGC	Homo sapiens
1907	160889	Platelet Activating Receptor Homolog (H963)	O14626	1224	CLVIRQLYRNKDNENYP	Homo sapiens
1908	160889	Platelet Activating Receptor	O14626	1225	CSTRIISFKAKEATLL	Homo sapiens

		Homolog (H963)	Platelet Activating Receptor Homolog (H963)	O14626		
1909	160889				1226	Homo sapiens
1910	161024		Protein A	NP_062832.1	1690	Homo sapiens
1911	161024		Protein A	NP_062832.1	1691	Homo sapiens
1912	161024		Protein A	NP_062832.1	1692	Homo sapiens
1913	161024		Protein A	NP_062832.1	1693	Homo sapiens
1914	161024		Protein A	NP_062832.1	1694	Homo sapiens
1915	161024		Protein A	NP_062832.1	1695	Homo sapiens
1916	161024		Protein A	NP_062832.1	1696	Homo sapiens
1917	161024		Protein A	NP_062832.1	1697	Homo sapiens
1918	161214		Galanin Receptor GalR3	AAC35944.1	202	Homo sapiens
1919	161214		Galanin Receptor GalR3	AAC35944.1	203	Homo sapiens
1920	161214		Galanin Receptor GalR3	AAC35944.1	204	Homo sapiens
1921	161214		Galanin Receptor GalR3	AAC35944.1	205	Homo sapiens
1922	161221		Urotensin-II Receptor (GPR14)	LR15	371	Homo sapiens
1923	161221		Urotensin-II Receptor (GPR14)	LR15	372	Homo sapiens
1924	161221		Urotensin-II Receptor (GPR14)	LR15	373	Homo sapiens
1925	161221		Urotensin-II Receptor (GPR14)	LR15	374	Homo sapiens
1926	161249		G Protein-Coupled Receptor GPR66	LR20	394	Homo sapiens
1927	161249		G Protein-Coupled Receptor GPR66	LR20	395	Homo sapiens
1928	161249		G Protein-Coupled Receptor GPR66	LR20	396	Homo sapiens
1929	161249		G Protein-Coupled Receptor GPR66	LR20	397	Homo sapiens
1930	161251		Purinergic Receptor P2Y10	O00398	859	Homo sapiens
1931	161251		Purinergic Receptor P2Y10	O00398	860	Homo sapiens
1932	161251		Purinergic Receptor P2Y10	O00398	862	Homo sapiens
1933	161251		Purinergic Receptor P2Y10	O00398	863	Homo sapiens
1934	161293		G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1672	Equine herpesvirus 2

1935	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1674	CDPYPEMSTNWMRRHAVAK	Equine herpesvirus 2
1936	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1675	CYVVIIRLLRRPSKK	Equine herpesvirus 2
1937	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1676	CKYIPFLSGDGEGKEGPT	Equine herpesvirus 2
1938	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1820	RNLITSSPAPTASPSAPS	Homo sapiens
1939	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1821	PSWTPSPRP GPAHPFLQPP	Homo sapiens
1940	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1822	RSSHQKRGITRDVGSNVC	Homo sapiens
1941	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1823	KSTSTASFVSSHMSVEE	Homo sapiens
1942	177168	Cysteinyi Leukotriene CYSLT1 Receptor	Q9Y271	1317	TSSPFLMAKPKQDEKNNTKC	Homo sapiens
1943	177168	Cysteinyi Leukotriene CYSLT1 Receptor	Q9Y271	1318	KKSMKKNLSSHKKAIG	Homo sapiens
1944	177168	Cysteinyi Leukotriene CYSLT1 Receptor	Q9Y271	1319	QRTIHLHLHNETKPC	Homo sapiens
1945	177168	Cysteinyi Leukotriene CYSLT1 Receptor	Q9Y271	1320	RKHSLSSVTYVPRKKASLPE	Homo sapiens
1946	177191	Histamine H3 Receptor	Q9Y5N1	474	RAVSYRAQGGDTRRAVRK	Homo sapiens
1947	177191	Histamine H3 Receptor	Q9Y5N1	475	QRRTRLRLDGAREAAAGPE	Homo sapiens
1948	177191	Histamine H3 Receptor	Q9Y5N1	476	QSFTQRFRLSRDRKVA	Homo sapiens
1949	177191	Histamine H3 Receptor	Q9Y5N1	477	RYGVGEAAVGAEGEATLG	Homo sapiens
1950	177191	Histamine H3 Receptor	Q9Y5N1	1477	SSRGTERPSLRKRGSKPSAS	Homo sapiens
1951	177191	Histamine H3 Receptor	Q9Y5N1	1479	KPSASSASLEKRMKMVS	Homo sapiens
1952	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2052	RTILFSFYFRDIPRANR	Homo sapiens
1953	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2053	RPEMSRGLLAVRGAFV	Homo sapiens
1954	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2059	CAVLSHIRRAQPWALLV	Homo sapiens
1955	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2733	RVLVSDSLFVICALSL	Homo sapiens

1956	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1014	KRKTNVLSPTSGSIS	Homo sapiens
1957	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1015	CFSQENPERPRSRIPST	Homo sapiens
1958	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1016	SYKDEDMYGTMKKMIC	Homo sapiens
1959	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1017	VERHMSIMRMVRVHSN	Homo sapiens
1960	189873	G Protein-Coupled Receptor GPR78	LR37	443	CQRMDTVTMKALALLAD	Homo sapiens
1961	189873	G Protein-Coupled Receptor GPR78	LR37	528	CSLRLPPEPERPRFAAFTAT	Homo sapiens
1962	189873	G Protein-Coupled Receptor GPR78	LR37	533	RGPLPPGICAHSAQGALRR	Homo sapiens
1963	189873	G Protein-Coupled Receptor GPR78	LR37	534	CRQAQARDLGAPWAVGLRSL	Homo sapiens
1964	189874	Neuromedin U Receptor 2	LR28	420	QQKLEDPFQKHLNSTEE	Homo sapiens
1965	189874	Neuromedin U Receptor 2	LR28	422	KDKSLEADEGNANIQRPC	Homo sapiens
1966	189874	Neuromedin U Receptor 2	LR28	423	SQHDPQLPPAQRNIFLTC	Homo sapiens
1967	189874	Neuromedin U Receptor 2	LR28	487	ILHPRAKLQSTRIRRALR	Homo sapiens
1968	189884	G Protein-Coupled Receptor Ls189884	LR27	415	CKKRGTKTNLNRNGIRSK	Homo sapiens
1969	189884	G Protein-Coupled Receptor Ls189884	LR27	418	EKPSSPSSGKGKTEKAE	Homo sapiens
1970	189884	G Protein-Coupled Receptor Ls189884	LR27	419	PSVQDNDPIPIWEHQETGE	Homo sapiens
1971	189884	G Protein-Coupled Receptor Ls189884	LR27	486	KKPPTVSESQETPAGNSEG	Homo sapiens
1972	189884	G Protein-Coupled Receptor Ls189884	LR27	1832	LVMSEEFREGKGVWK	Homo sapiens
1973	189884	G Protein-Coupled Receptor Ls189884	LR27	1833	GLPDKV/PSPEPASPIEK	Homo sapiens
1974	189884	G Protein-Coupled Receptor Ls189884	LR27	1834	PDVEGFWHERDTVPSVQ	Homo sapiens
1975	189884	G Protein-Coupled Receptor Ls189884	LR27	1835	RHHEGVEMCLVDVPAVAEE	Homo sapiens
1976	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1685	RVPQTGPSTASGVPE	Homo sapiens
1977	189895	G Protein-Coupled	AAK12637.1	1686	ETPRQRSELSRSTMTVTS	Homo sapiens

1978	189895	Receptor GPR61	AAK12637.1	1687	SSGAPQTTPHRTFGGK	Homo sapiens
1979	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1688	KPAPEEELRLPSREGSIEE	Homo sapiens
1980	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1689	CPSESWSRPLPSPKQE	Homo sapiens
1981	189900	Spingolipid Receptor Edg8	LR1	312	TGKLRGARYQPGAGLRAD	Homo sapiens
1982	189900	Spingolipid Receptor Edg8	LR1	316	ALERSLTMARRGPAPVSS	Homo sapiens
1983	189900	Spingolipid Receptor Edg8	LR1	317	DGSFSGSERSSPQRDGLD	Homo sapiens
1984	189900	Spingolipid Receptor Edg8	LR1	318	CGRDPSGSGQASAAEASG	Homo sapiens
1985	189901	G Protein-Coupled Receptor Ls189901	ENSP00000071589	2266	ASRKAEAGKLVQGEVS	Homo sapiens
1986	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP00000071589	2270	SCLSYRVGTKPSASLR	Homo sapiens
1987	189901	G Protein-Coupled Receptor Ls189901	ENSP00000071589	2271	RVDYYLLHETWRFGAAC	Homo sapiens
1988	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP00000071589	2272	HQSRALLGLTRGRQGPVSD	Homo sapiens
1989	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP00000071589	2273	CIHTRPWSNTVFLVSL	Homo sapiens
1990	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP00000071589	2274	RGRQGPVSESSYQPSR	Homo sapiens
1991	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2108	IDRYLIKYPFREHLLQKKE	Homo sapiens
1992	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2109	TDNGTTCNDFASSGDPN	Homo sapiens
1993	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2110	FLQQRNRQVATAIPLE	Homo sapiens
1994	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2111	RNVRIASRLGSKWKYQC	Homo sapiens
1995	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2112	GDHFRDMLMNLQRHNFKS	Homo sapiens

1996	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1721	CVAFPLAVGNPDLQIPSR	Homo sapiens
1997	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1722	NTLRHNLRIHSYPEGIC	Homo sapiens
1998	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1723	QASKLGLMSLQRPQMISID	Homo sapiens
1999	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1724	DMMPKSFKLPLQPGHTKRR	Homo sapiens
2000	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1715	QNLKDPVQIKIKHTRTQE	Homo sapiens
2001	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1716	KNKSFGGWNTSGCVAHRD	Homo sapiens
2002	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1717	RNNNEVWGKESYGKEKGDE	Homo sapiens
2003	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1718	CGRNGKRSNRTLREEVLR	Homo sapiens
2004	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1719	TSKSXSSTYFKRNSHTD	Homo sapiens
2005	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1720	DKSLSLAHADGDQTS	Homo sapiens
2006	190026	G Protein-Coupled Receptor JEG 18	LR24	407	LFPLLRTSDDTPGNRTKC	Homo sapiens
2007	190026	G Protein-Coupled Receptor JEG 18	LR24	408	QDKYPMQAQDLGEKQKALK	Homo sapiens
2008	190026	G Protein-Coupled Receptor JEG 18	LR24	409	SFPLDFLVKSNEIKSC	Homo sapiens
2009	190026	G Protein-Coupled Receptor JEG 18	LR24	410	RRRLSRQDLHDSQLHAK	Homo sapiens
2010	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1725	KGEAKLDSRAKDVLTIQE	Homo sapiens
2011	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1727	DHKEQPIVTENAEERQLVVKD	Homo sapiens
2012	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1728	EDFEEQTLTLFDGERERK	Homo sapiens
2013	190031	G Protein-Coupled	AAD55586.1	1729	EGKEGDYIRIPERILLDVQD	Homo sapiens

2014	190168	Receptor VLGR1	AAF27278.1	324	SEAYADGIEGYDILVACSSS	Homo sapiens
2015	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	326	NNLRENNQNNQVKKDKKAAK	Homo sapiens
2016	190168	Receptor GPR58	AAF27278.1	379	DPFLNFSTPVVLFDAIT	Homo sapiens
2017	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	380	GKIFSSCFHNTILCMQKE	Homo sapiens
2018	190170	Receptor GPR58	AAF27279.1	327	CPKFVNKILSSHQPLFS	Homo sapiens
2019	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	328	KQHARVISHVPENTKGAVKK	Homo sapiens
2020	190170	Receptor GPR57	AAF27279.1	329	ENTKGAVKKHLSKKDKRKA	Homo sapiens
2021	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	330	CKFHTSFDMMLRLTSI	Homo sapiens
2022	190188	Receptor GPR57	LR36	439	ENHDQDLDELQLEMEDSKP	Homo sapiens
2023	190188	G Protein-Coupled Receptor LGR6	LR36	440	NPHFRDDLRLRPRAGDS	Homo sapiens
2024	190188	Receptor LGR6	LR36	442	EDLHLDDESSKRPLGLLAR	Homo sapiens
2025	190188	G Protein-Coupled Receptor LGR6	LR36	621	DSGPLAYAAAGELEKSSC	Homo sapiens
2026	190414	Receptor LGR6	LR36	1836	CAARRQHALLYNVKKRHSLE	Homo sapiens
2027	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1837	DGSLKAKEGSGTSESSV	Homo sapiens
2028	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1838	CSIDLGEDGMEFGEDDIN	Homo sapiens
2029	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1839	SEDDVEAVNIPESPPS	Homo sapiens
2030	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1840	MHKTIKKEIQDMLKKFFC	Homo sapiens
2031	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1841	KEDSHDPLPGTEGGTEG	Homo sapiens
2032	190418	Inflammation-Related G Protein-Coupled Receptor	LR8	343	RQVKRAAQAALDQYKLRQAS	Homo sapiens

2033	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	344	RTDEAMPGRFQELDSRLASG	Homo sapiens
2034	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	345	DSSEVGDDQINSKRAKQMAEK	Homo sapiens
2035	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	346	KAQPIKGARRAPDSSEFGK	Homo sapiens
2036	190419	EX33 G Protein-Coupled Receptor Ls190419	CAC33085.1	2716	RRKSNFRLRGYSTGKT	Homo sapiens
2037	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2717	RRQKSSVNYLLALAAAD	Homo sapiens
2038	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2719	CFLTSPYVWWPNWIT	Homo sapiens
2039	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2725	CSIFFILNSIIVKLR	Homo sapiens
2040	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2754	GRUVSLLSFSIPH	Homo sapiens
2041	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2755	FFLELWIHVVDRE	Homo sapiens
2042	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2756	MDPTISTLDTLTP	Homo sapiens
2043	190427	Cysteiny/ Leukotriene Receptor	CYSLT2 LR49	471	ASSIMLLDSGSEGNQSVTSC	Homo sapiens
2044	190427	Cysteiny/ Leukotriene Receptor	CYSLT2 LR49	472	RVLLKVEVPESGLURVSHRK	Homo sapiens
2045	190427	Cysteiny/ Leukotriene Receptor	CYSLT2 LR49	473	KDRLSALRKGHQPQAKATKC	Homo sapiens
2046	190427	Cysteiny/ Leukotriene Receptor	CYSLT2 LR49	512	MEPNGTFSNNNSRNC	Homo sapiens
2047	190427	Cysteiny/ Leukotriene Receptor	CYSLT2 NP_065110.1	2253	CTENFKREFFIVYLIF	Homo sapiens
2048	190427	Cysteiny/ Leukotriene Receptor	CYSLT2 NP_065110.1	2254	GVLGNGLSIVVFLQPYK	Homo sapiens
2049	190427	Cysteiny/ Leukotriene Receptor	CYSLT2 NP_065110.1	2255	ADYYLRGSNWIFGDLAC	Homo sapiens
2050	190427	Cysteiny/ Leukotriene Receptor	CYSLT2 NP_065110.1	2256	FRLHVTSIRS AWILC	Homo sapiens

2051	190427	Receptor	Cysteinyl Leukotriene CysLT2	NP_065110.1	2257	CGIIWILIMASSIMLLDSGS	Homo sapiens
2052	190427	Receptor	Cysteinyl Leukotriene CysLT2	NP_065110.1	2258	CLELNLYKIAKLQTMNYIAL	Homo sapiens
2053	190427	Receptor	Cysteinyl Leukotriene CysLT2	NP_065110.1	2260	VSHRKALTIITLIUFLC	Homo sapiens
2054	190427	Receptor	Cysteinyl Leukotriene CysLT2	NP_065110.1	2261	CFLPYHTLRTVHLTWKVGL	Homo sapiens
2055	190427	Receptor	Cysteinyl Leukotriene CysLT2	NP_065110.1	2262	CKDRLHKALVITLALA	Homo sapiens
2056	190427	Receptor	Cysteinyl Leukotriene CysLT2	NP_065110.1	2263	YFAGENFKDRLKSALRKG	Homo sapiens
2057	190427	Receptor	Cysteinyl Leukotriene CysLT2	NP_065110.1	2264	HPQKAKTKCVFVSVWLKKE	Homo sapiens
2058	190437	G Protein-Coupled Receptor C5L2	LR31		429	DSVSYEYGDYSDLSDRPVDC	Homo sapiens
2059	190437	G Protein-Coupled Receptor C5L2	LR31		430	RESQGGQDESVDKSTSHD	Homo sapiens
2060	190437	G Protein-Coupled Receptor C5L2	LR31		431	PSAIVRRLLHQEHFARLQC	Homo sapiens
2061	190437	G Protein-Coupled Receptor C5L2	LR31		432	CHWALRESQGGQDESVDKKS	Homo sapiens
2062	190437	G Protein-Coupled Receptor C5L2	NP_060955.1		2818	MGNDSVSYEYGDYSDLSDRPVDC	Homo sapiens
2063	190438	G Protein-Coupled Receptor Ls190438	ENSP00000080322		2585	TERLKIRWHTSDNQVRPQAC	Homo sapiens
2064	190484	G Protein-Coupled Receptor Ls190484	LR33		434	EADLGATGHRPRTLEDDE	Homo sapiens
2065	190484	G Protein-Coupled Receptor Ls190484	LR33		435	RTCHRGQGPAAACRGFARVAR	Homo sapiens
2066	190484	G Protein-Coupled Receptor Ls190484	LR33		436	EERPGSFPTPEQTQLDSEG	Homo sapiens
2067	190484	G Protein-Coupled Receptor Ls190484	LR33		437	RSDPTAQPLNPTAQPSQSD	Homo sapiens
2068	190595	G Protein-Coupled Receptor SH120	NP_057418.1		1730	RNVTDTDILALERRLLQ	Homo sapiens
2069	190595	G Protein-Coupled Receptor SH120	NP_057418.1		1731	KKKRMAMARRTMFQKGE	Homo sapiens

2070	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1732	KSVTTSASGSENLTUQQE	Homo sapiens
2071	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1733	EVDAALEELSRQLFLETAD	Homo sapiens
2072	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1734	DRVGKTDPVTRGIEIT	Homo sapiens
2073	190599	G Protein-Coupled Receptor GPRC58	O75205	411	VRLPFIKEKEKSPVGLH	Homo sapiens
2074	190599	G Protein-Coupled Receptor GPRC58	O75205	412	DEHNAALRTAGFPNGSLGKR	Homo sapiens
2075	190599	G Protein-Coupled Receptor GPRC58	O75205	413	GKRPSGSLGKRPSAPFRSNV	Homo sapiens
2076	190599	G Protein-Coupled Receptor GPRC58	O75205	414	SQPRMRETAFEEDVQLPR	Homo sapiens
2077	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	542	GDPAIYQSLKAGNAYSRHC	Homo sapiens
2078	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	543	PFSSHSSYTVRSKKIFLSKL	Homo sapiens
2079	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	619	GKILLNLTGMRRKNTCQN	Homo sapiens
2080	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	620	EEVTTLVQAIRITSYME	Homo sapiens
2081	190623	Melanopsin	AAF24978.1	2137	CKNGESLWQRQLQSE	Homo sapiens
2082	190623	Melanopsin	AAF24978.1	2138	RHSRPYSYRSTHRST	Homo sapiens
2083	190623	Melanopsin	AAF24978.1	2139	TSHTSNLSWISIRRRQE	Homo sapiens
2084	190623	Melanopsin	AAF24978.1	2140	DLEAKAPRPQGHEAET	Homo sapiens
2085	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1735	KLGRRPVAVDVLLNLIASD	Homo sapiens
2086	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1736	KTRPRLGQAGLVSVAC	Homo sapiens
2087	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1737	EFGDISHSQGTNGTC	Homo sapiens
2088	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1738	SRLVWILGRGGSHRRQR	Homo sapiens
2089	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1739	GQWQQESSMELKEQKGG	Homo sapiens
2090	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1740	EEQRADRPAPERKTEHSQGC	Homo sapiens
2091	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	2569	MDTGPDQSYFSGNHWVFVS	Homo sapiens

2092	190701	Receptor GPR41 & GPR42 C-C Chemokine Receptor 11	AAF61299.1	1441	VAIAYYKQRTKTDV	Homo sapiens
2093	190701	C-C Chemokine Receptor 11	AAF61299.1	1442	VAVTKVPSQSGVGKPCWII	Homo sapiens
2094	190701	C-C Chemokine Receptor 11	AAF61299.1	1443	CNMSKRMDIAIQVTESI	Homo sapiens
2095	190701	C-C Chemokine Receptor 11	AAF61299.1	1444	RQSVVEFPFDSEGTEP	Homo sapiens
2096	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1741	GHPPGSGGAESADTEARVR	Homo sapiens
2097	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1742	HSVASALKSHRTRGHGRGDC	Homo sapiens
2098	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1743	KGGAAVAGGRPTGASARR	Homo sapiens
2099	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1744	CLVRRERKALKSLWR	Homo sapiens
2100	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1745	RPFTATIKPEHEDQGLQ	Homo sapiens
2101	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	339	APPVLDVGVYSFIREDDQC	Homo sapiens
2102	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	340	HDRRKMKPVGFVAASQIN	Homo sapiens
2103	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	341	RRRLVLDEFKMEKRISR	Homo sapiens
2104	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	342	LRRCFSTLLYCRKSRLPRE	Homo sapiens
2105	190725	G Protein-Coupled Receptor GPR26	LR26	554	PLITAGVVARRQAPAGDRLC	Homo sapiens
2106	190725	G Protein-Coupled Receptor GPR26	LR26	555	CSRRPDERLRFVFTGA	Homo sapiens
2107	190725	G Protein-Coupled Receptor GPR26	LR26	557	CKELNRLHRRSHSSG	Homo sapiens
2108	190725	G Protein-Coupled Receptor GPR26	LR26	567	CLEEQKRRRQRATKKIST	Homo sapiens
2109	190741	Sreb3	LR9	516	EPEEVSGALSPPSASAYVK	Homo sapiens
2110	190741	Sreb3	LR9	519	NGHAASRRLGMDVKGEK	Homo sapiens
2111	190741	Sreb3	LR9	526	KKCLRTHAPCWGTGGAPAPR	Homo sapiens
2112	190741	Sreb3	LR9	527	VIMAATHAWVGKLLFEYR	Homo sapiens

2113	190742	G Protein-Coupled Receptor H7TBA62	LR23	550	RRAPGPPSDTFVFNALAD	Homo sapiens
2114	190742	G Protein-Coupled Receptor H7TBA62	LR23	551	QRRQRRRQDSRVARSVR	Homo sapiens
2115	190742	G Protein-Coupled Receptor H7TBA62	LR23	552	RREPRQALAGIFRDLSR	Homo sapiens
2116	190742	G Protein-Coupled Receptor H7TBA62	LR23	553	KQVGRRWVASNPRESRPS	Homo sapiens
2117	190743	G Protein-Coupled Receptor GPRC5D	LR32	558	KDCIESTGDYFLLCDAEGP	Homo sapiens
2118	190743	G Protein-Coupled Receptor GPRC5D	LR32	569	VENQELSRGTFLGDSGR	Homo sapiens
2119	190743	G Protein-Coupled Receptor GPRC5D	LR32	570	GDSGSREVLLEKEQEKNIHA	Homo sapiens
2120	190743	G Protein-Coupled Receptor GPRC5D	LR32	571	SMILRGNPQFQRQPWDDP	Homo sapiens
2121	190744	G Protein-Coupled Receptor GPRC5D	LR34	529	KVPSEELTSSSHGPPPTAR	Homo sapiens
2122	190744	G Protein-Coupled Receptor GPRC5C	LR34	532	RSGEGGPGQGNSSAGWAV	Homo sapiens
2123	190744	G Protein-Coupled Receptor GPRC5C	LR34	535	QDTKKRSLGTQVFFLLGT	Homo sapiens
2124	190744	G Protein-Coupled Receptor GPRC5C	LR34	538	KEQKGGSMFVENKAFSMDE	Homo sapiens
2125	190745	G Protein-Coupled Receptor LGR7	LR40	560	TATEIRNQVKEMILAKR	Homo sapiens
2126	190745	G Protein-Coupled Receptor LGR7	LR40	561	NYRQRKSMDSKGQKTYAPS	Homo sapiens
2127	190745	G Protein-Coupled Receptor LGR7	LR40	565	SCSNLTVLMRKKNKINHLN	Homo sapiens
2128	190745	G Protein-Coupled Receptor LGR7	LR40	566	DELDLGSNKIENLPPIFKD	Homo sapiens
2129	190748	GPCR Ls190748	LR47	546	QLSSPSRPTQKTLCSLR	Homo sapiens
2130	190748	GPCR Ls190748	LR47	547	DMILKIASMHQQIRKMEHAG	Homo sapiens
2131	190748	GPCR Ls190748	LR47	548	AGGYRSRPTPSDFKALRTVS	Homo sapiens
2132	190748	GPCR Ls190748	LR47	549	RESSCHIVTISSEFDG	Homo sapiens
2133	190748	GPCR Ls190748	LR47	1481	GVKKVLTSFLFLSARNC	Homo sapiens
2134	190748	GPCR Ls190748	LR47	1482	NSLLNPLVAYWQKEVRLQ	Homo sapiens
2135	190749	G Protein-Coupled	LR48	467	RRAALRPPRPARGSLRSD	Homo sapiens

2136	190749	Receptor GPR62	LR48	488	RPVRLALGRLSRRALPGPVR	Homo sapiens
2137	190749	G Protein-Coupled Receptor GPR62	LR48	510	DSRLSILPLRPRLPGGK	Homo sapiens
2138	190749	G Protein-Coupled Receptor GPR62	LR48	511	RPPEGPAVGPSEAPEQIPE	Homo sapiens
2139	190749	G Protein-Coupled Receptor GPR62	LR48	2702	VVARRAALRPPrPA	Homo sapiens
2140	190749	G Protein-Coupled Receptor GPR62	LR48	2703	PSEAPEQIPELAGGR	Homo sapiens
2141	190749	G Protein-Coupled Receptor GPR62	LR48	2704	GPSEAPEQIPELAG	Homo sapiens
2142	190774	Histamine H4 Receptor	NP_067637.2	2235	PDNSTINLSLSTRVTLAFF	Homo sapiens
2143	190774	Histamine H4 Receptor	NP_067637.2	2237	VVDKNLRHRSSYFFLN	Homo sapiens
2144	190774	Histamine H4 Receptor	NP_067637.2	2240	LYPHITLFEWDFGKEIC	Homo sapiens
2145	190774	Histamine H4 Receptor	NP_067637.2	2242	TQHTGVLVKIVTLMVAV	Homo sapiens
2146	190774	Histamine H4 Receptor	NP_067637.2	2243	VNGPMILVSESWKDEGSEC	Homo sapiens
2147	190774	Histamine H4 Receptor	NP_067637.2	2244	CEPGFFSEWYLAIISFL	Homo sapiens
2148	190774	Histamine H4 Receptor	NP_067637.2	2245	AYENMNIVWSLWKRDLHSLRC	Homo sapiens
2149	190774	Histamine H4 Receptor	NP_067637.2	2246	CGHSFRGRSLSSRLS	Homo sapiens
2150	190774	Histamine H4 Receptor	NP_067637.2	2247	IASKMGFSQSDSVLHQIRE	Homo sapiens
2151	190774	Histamine H4 Receptor	NP_067637.2	2249	IVLSFYSSATGPKSVWYRIA	Homo sapiens
2152	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2085	IIRVTVPGKTGTAC	Homo sapiens
2153	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2086	SPWTNDPKERINVAVA	Homo sapiens
2154	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2087	RIRELLQGMVKEIGIAVD	Homo sapiens
2155	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2088	TQTSDIATNSTLPSAE	Homo sapiens
2156	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	481	TEVPDSAGTSNTHITSAS	Homo sapiens
2157	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	522	GDTAVERLNVFITMAKV	Homo sapiens
2158	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	523	MSLAKRVMTGLWIFTI	Homo sapiens
2159	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	525	LHFIIQFTVPMISITV	Homo sapiens

2160	190948	like 2 (FPRL2)	NP_038475.1	1658	DELLEAPGDLETLPRLQQHC	Homo sapiens
2161	190948	EMR2 Hormone Receptor	NP_038475.1	1659	CVASHLLDGLDVLRLGSKN	Homo sapiens
2162	190948	EMR2 Hormone Receptor	NP_038475.1	1660	KSGDPGPSVAVGLVSIPIG	Homo sapiens
2163	190948	EMR2 Hormone Receptor	NP_038475.1	1661	SKGIRKLKTESEMIHTLSS	Homo sapiens
2164	190948	EMR2 Hormone Receptor	NP_038475.1	1662	ELSLEVQKGVDRSVTLRQNG	Homo sapiens
2165	190948	EMR2 Hormone Receptor	NP_038475.1	1663	EPEKQMLHETHQGLLDGGS	Homo sapiens
2166	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1492	KRMQKRSVTALMVNLALAD	Homo sapiens
2167	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1493	RPFVSQKLRTKAMARR	Homo sapiens
2168	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1494	ASYSDIGRRRLQARFR	Homo sapiens
2169	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1495	LEGTGSEASSTRKGG	Homo sapiens
2170	191039	Trace Amine Receptor 1 (TA1)	LR122	2039	RKALKMMILFGKIFQKDSRC	Homo sapiens
2171	191039	Trace Amine Receptor 1 (TA1)	LR122	2040	QIGLEMKNIGISQSKERKAV	Homo sapiens
2172	191039	Trace Amine Receptor 1 (TA1)	LR122	2041	RYLJAKEGARLISDANQK	Homo sapiens
2173	191039	Trace Amine Receptor 1 (TA1)	LR122	2042	ELNFKGAEEIYKHHVC	Homo sapiens
2174	191039	Trace Amine Receptor 1 (TA1)	LR122	2043	CVKNNWSNDVRASLYS	Homo sapiens
2175	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1569	SAEPPADWDGAGGSYRLRG	Homo sapiens
2176	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1571	GIVRRVRVS/KRVSVLN	Homo sapiens
2177	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1572	RNEEFRRSVRSVLPGVGDA	Homo sapiens
2178	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1573	CEEEESWAGRRIPVSLLYSG	Homo sapiens
2179	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1651	CYLGIIVRRVRVS/KRVS	Homo sapiens
2180	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1544	KELYRSVVRTRGVGVKPR	Homo sapiens
2181	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1545	ILTNRQPRDKNVKKCS	Homo sapiens

2182	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1546	CPNSATLSQDNRKKEQDGG	Homo sapiens
2183	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1570	TTRPFKTSNPKNLLGAK	Homo sapiens
2184	191193	Trace Amine Receptor 3 (TA3)	LR88	1969	ANEEGIELVVA	Homo sapiens
2185	191193	Trace Amine Receptor 3 (TA3)	LR88	2316	RKIESTASQAQSS	Homo sapiens
2186	191193	Trace Amine Receptor 3 (TA3)	LR88	2571	LVDAVIDAYMNF	Homo sapiens
2187	191193	Trace Amine Receptor 3 (TA3)	LR88	2573	RTDSSTTNLFSEEVET	Homo sapiens
2188	191196	G Protein-Coupled Receptor GPR80	IP_13092	1864	NASDFPDYAAAFGNCTDE	Homo sapiens
2189	191196	G Protein-Coupled Receptor GPR80	IP_13092	1865	TFJTSTNRTNRSACLD	Homo sapiens
2190	191196	G Protein-Coupled Receptor GPR80	IP_13092	1866	TLTHGLQTDSCCLKQKARR	Homo sapiens
2191	191196	G Protein-Coupled Receptor GPR80	IP_13092	1867	RLLSICSSENGIHEA	Homo sapiens
2192	191196	G Protein-Coupled Receptor GPR80	IP_13092	1868	QQAVCSTVRCKVSGNLE	Homo sapiens
2193	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2749	QDIAEVDHSEGCF	Homo sapiens
2194	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2750	RKQWRLQQPILKLA	Homo sapiens
2195	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2751	CSISINFPSFTTVMTC	Homo sapiens
2196	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2752	QWFLLWIWKDSDV	Homo sapiens
2197	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2575	AFLSDNTIEVRINRTLKK	Homo sapiens
2198	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2576	QETKNEFRNLKQIGSKC	Homo sapiens
2199	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2577	CNNKTHWAPVRSTM	Homo sapiens
2200	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2581	TKMAEYDLQNDVFIIPD	Homo sapiens
2201	193511	EGF-Like Module-Containing	AAK15076.1	1665	CQDITSSKTEGRKELQKIV	Homo sapiens

2202	193511	Mucin-Like Receptor EMR3	AAK15076.1	1666	RDVESKVIETALKDPEQK	Homo sapiens
2203	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1667	KIGNDSVAIETQAITDNC	Homo sapiens
2204	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1668	CSEERKTFNLNVQMNSMDIR	Homo sapiens
2205	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1669	EEMDKKDKQVVLNSQVVSAA	Homo sapiens
2206	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1670	SKSVTLTFQHVKNMTPSTK	Homo sapiens
2207	193516	Mucin-Like Receptor EMR3	CAC21687.1	2142	CILLPTAVIVFSYVKIAK	Homo sapiens
2208	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2144	RPDSIPQLLSWPTLLA	Homo sapiens
2209	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2145	CQJTGGLKATKKKSLEG	Homo sapiens
2210	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2146	RLHTVTIVRKSSAVLE	Homo sapiens
2211	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2620	PTAVIVFSYVKIAKV	Homo sapiens
2212	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1947	KLAQRUREVTGHTDHYFSQD	Homo sapiens
2213	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1948	CALQTWGSEERRGLDTSKD	Homo sapiens
2214	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2734	RGRRRQSARNSRGPPEQPNE	Homo sapiens
2215	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2735	RNSRGPPEQPNEELG	Homo sapiens
2216	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2736	AGVREDVRPHTVVLRL	Homo sapiens
2217	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2742	QLDQVPSRHPSPRE	Homo sapiens

2218	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2744	LDLSRSSNSREQLDQV	Homo sapiens
2219	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1903	REEHFMVDARNSYPLYSC	Homo sapiens
2220	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1904	PGPAPGGEEAADPRASRR	Homo sapiens
2221	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1905	CPRPSGSHKAYSERPGGLL	Homo sapiens
2222	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1906	PSSGAPRPGRLPLRNGRVA	Homo sapiens
2223	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2018	FLGKNDIDIKKELIVN	Homo sapiens
2224	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2019	QVTVRDSKEKRDRLNFKL	Homo sapiens
2225	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2020	CERTKIWGTFKINERTND	Homo sapiens
2226	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2021	SKYANGIEIQLKKAYER	Homo sapiens
2227	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2022	CIVWFVIRTERS LHAP	Homo sapiens
2228	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2023	KILALWFDSREISFEAC	Homo sapiens
2229	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2024	CVHQDVMKLAAYADTLP	Homo sapiens
2230	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2027	RFGNSLHPVIRVVMGD	Homo sapiens
2231	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2028	KTKQIRTRVLAMFKISC	Homo sapiens
2232	194743	FLJ14454	LR77	1855	KTDENEQDQASVDMMVFSP	Homo sapiens
2233	194743	FLJ14454	LR77	1856	KKDYGYPKSLDLSNVGC	Homo sapiens
2234	194743	FLJ14454	LR77	1857	KNLQTSDDGINNIDFDNN	Homo sapiens
2235	194743	FLJ14454	LR77	1858	SQNGNNPQWELDYRQEKIC	Homo sapiens
2236	194743	FLJ14454	LR77	1859	RPRLRVKMYNLFRLSPTLHE	Homo sapiens
2237	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1845	CNPSVPKQIRVMKLTGM	Homo sapiens
2238	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1846	RLTRWRTRYKTRINLG	Homo sapiens
2239	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1847	KDGVESCAFDLTSPDDVL	Homo sapiens
2240	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1848	LSGNFQKRLPQIQRRATE	Homo sapiens

2241	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1849	TIIRSRKTKVPDIYC	Homo sapiens
2242	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1907	RRATEKEINNMGNLTKSHF	Homo sapiens
2243	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2089	CRIEGDTISQVMPPLIVA	Homo sapiens
2244	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2090	RRHWAFGDIPCRVGLFTL	Homo sapiens
2245	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2091	CESFIMESANGWHDIM	Homo sapiens
2246	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2092	CSFKIVWSLRRRQQLARQAR	Homo sapiens
2247	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2093	RRRQQLARQARMKKATR	Homo sapiens
2248	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2094	TVPSSACDPSVHGALH	Homo sapiens
2249	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2095	CSLKPQKPGHSHKTQRPEEM	Homo sapiens
2250	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2096	CISVANFSGSGDGQWD	Homo sapiens
2251	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2034	RTRKQHSSEATNSSNRVFWYC	Homo sapiens
2252	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2035	RVISQISADNYKIHGDPFA	Homo sapiens
2253	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2036	TSSSARTSNAKPFHSD	Homo sapiens
2254	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2037	NGTRPGMASTKLSPWD	Homo sapiens
2255	194858	G Protein-Coupled Receptor Ls194858	LR84	1933	LGIADWRRLRSPPAGC	Homo sapiens
2256	194858	G Protein-Coupled Receptor Ls194858	LR84	1934	GERYMAVLRLPLQPPGS	Homo sapiens
2257	194858	G Protein-Coupled Receptor Ls194858	LR84	1935	CRDEPSALARALTWRQAR	Homo sapiens
2258	194858	G Protein-Coupled Receptor Ls194858	LR84	1936	AAQRCLQGLWGRASRD	Homo sapiens
2259	194858	G Protein-Coupled Receptor Ls194858	LR84	1937	RDSPGPSIAYHPSSQSSVD	Homo sapiens
2260	194878	MrgX3 G Protein-Coupled	AAK91806.1	2748	ALFSRIHLDWKVLF	Homo sapiens

2261	194903	Receptor	ENSP00000198236	1991	CIAFKDIMPFSAGVGDER	Homo sapiens
2262	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1992	KAFFEEAYARADKKAPRPC	Homo sapiens
2263	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1993	ETKIQWHGKDNQVPSVC	Homo sapiens
2264	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1994	CSYLGKDLPENYNEAK	Homo sapiens
2265	194904	WO0034334-hFB41A	LR114	2011	SDYDMPLEDEDEVINS	Homo sapiens
2266	194904	WO0034334-hFB41A	LR114	2014	NPHGAHATSPFNFSY	Homo sapiens
2267	194905	G Protein-Coupled Receptor MGC7035	LR112	1986	ERALPRYMASVYNIRHVC	Homo sapiens
2268	194905	G Protein-Coupled Receptor MGC7035	LR112	1987	CAKMQNAEAAADATLVF	Homo sapiens
2269	194905	G Protein-Coupled Receptor MGC7035	LR112	1988	DRDTGRLEPSAHRLLVATVC	Homo sapiens
2270	194905	G Protein-Coupled Receptor MGC7035	LR112	1989	RYMNGSPSKLQRLMKKLPC	Homo sapiens
2271	194907	G Protein-Coupled Receptor 14273	LR116	2003	CARAAAGDAPLRSLQANRTR	Homo sapiens
2272	194907	G Protein-Coupled Receptor 14273	LR116	2004	VISYSKILQTTKASRKRL	Homo sapiens
2273	194907	G Protein-Coupled Receptor 14273	LR116	2005	TVSLAYSRSHQIRVSQQD	Homo sapiens
2274	194907	G Protein-Coupled Receptor 14273	LR116	2006	CTWFPEKGAILDTSVKRND	Homo sapiens
2275	194908	G Protein-coupled Receptor	LR117	2007	TYGRDNGQLLGERVARRDIC	Homo sapiens
2276	194908	Gpcrb4	LR117	2008	QETLPTLQPNQNMTEERQR	Homo sapiens
2277	194908	G Protein-coupled Receptor	LR117	2009	RTSQSYTCNQECDNCLNAT	Homo sapiens
2278	194908	Gpcrb4	LR117	2010	RPQSHPRTPDDPKITVSC	Homo sapiens
2279	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2312	VARRQAKKIENTGSKT	Homo sapiens
2280	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2313	KVIVTGQVLKNSSA	Homo sapiens

2281	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2318	MSSNSSILLVAVQLC	Homo sapiens
2282	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2307	IAKQQAIIETSSKV	Homo sapiens
2283	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2314	MTSNFSQPVVQLC	Homo sapiens
2284	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2319	KILSGDVLKAS	Homo sapiens
2285	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2570	SGDVLKASSISLFLF	Homo sapiens
2286	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2727	QDKPEVDKGGGQLPEESL	Homo sapiens
2287	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2728	LINSHLIRKILVS	Homo sapiens
2288	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2729	MDPTVPVFGTKL	Homo sapiens
2289	195015	G Protein-Coupled Receptor GPR82	AAL26482	2706	RYATLMQKDSSETT	Homo sapiens
2290	195015	G Protein-Coupled Receptor GPR82	AAL26482	2707	KIFYGHLKKFRQPNF	Homo sapiens
2291	195015	G Protein-Coupled Receptor GPR82	AAL26482	2708	YSVIEATEGEESLC	Homo sapiens
2292	195015	G Protein-Coupled Receptor GPR82	AAL26482	2715	CTSIMKDLTYSSVKR	Homo sapiens

SEQ ID NO:	LS_ID	Gene	Antibody Company Name
1	127	5-HT1A Receptor	Chemicon
1	127	5-HT1A Receptor	Research Diagnostics
1	127	5-HT1A Receptor	Santa Cruz
3	128	5-HT1B Receptor	Chemicon
3	128	5-HT1B Receptor	Research Diagnostics
3	128	5-HT1B Receptor	Santa Cruz
5	129	5-HT1D Receptor	Research Diagnostics
5	129	5-HT1D Receptor	Santa Cruz
11	132	5-HT2A Receptor	Calbiochem
11	132	5-HT2A Receptor	Research Diagnostics
13	133	5-HT2B Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Santa Cruz
21	139	5-HT7 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Alpha Diagnostic Int.
23	272	Adenosine A1 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Santa Cruz
25	273	Adenosine A2a Receptor	Alpha Diagnostic Int.
25	273	Adenosine A2a Receptor	Calbiochem
25	273	Adenosine A2a Receptor	Chemicon
25	273	Adenosine A2a Receptor	Santa Cruz
27	274	Adenosine A2b Receptor	Alpha Diagnostic Int.
27	274	Adenosine A2b Receptor	Chemicon
27	274	Adenosine A2b Receptor	Santa Cruz
29	275	Adenosine A3 Receptor	Alpha Diagnostic Int.
29	275	Adenosine A3 Receptor	Santa Cruz
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Alpha Diagnostic Int.
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Chemicon
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Research Diagnostics
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Santa Cruz
35	377	Alpha 1b-adrenoceptor	Research Diagnostics
35	377	Alpha 1b-adrenoceptor	Santa Cruz
37	379	Alpha 1c-adrenoceptor	Research Diagnostics
37	379	Alpha 1c-adrenoceptor	Santa Cruz
39	387	Alpha 2a-adrenoceptor	Calbiochem
39	387	Alpha 2a-adrenoceptor	Santa Cruz
41	388	Alpha 2b-adrenoceptor	Research Diagnostics
41	388	Alpha 2b-adrenoceptor	Santa Cruz
43	389	Alpha 2c-adrenoceptor	Research Diagnostics
43	389	Alpha 2c-adrenoceptor	Santa Cruz
45	599	Bradykinin B1 Receptor	Research Diagnostics
49	635	Beta-1 adrenoceptor	Calbiochem
49	635	Beta-1 adrenoceptor	Research Diagnostics

49	635	Beta-1 adrenoceptor	Santa Cruz
51	640	Beta-2 adrenoceptor	Research Diagnostics
51	640	Beta-2 adrenoceptor	Santa Cruz
53	643	Beta-3 adrenoceptor	Alpha Diagnostic Int.
53	643	Beta-3 adrenoceptor	Chemicon
53	643	Beta-3 adrenoceptor	Research Diagnostics
53	643	Beta-3 adrenoceptor	Santa Cruz
57	692	Bombesin Receptor Subtype-3	Alpha Diagnostic Int.
57	692	Bombesin Receptor Subtype-3	Chemicon
59	729	CXC Chemokine Receptor 5	Research Diagnostics
59	729	CXC Chemokine Receptor 5	Santa Cruz
61	735	C-C Chemokine Receptor 1	Calbiochem
61	735	C-C Chemokine Receptor 1	Capralogics
61	735	C-C Chemokine Receptor 1	Chemicon
61	735	C-C Chemokine Receptor 1	Research Diagnostics
61	735	C-C Chemokine Receptor 1	Santa Cruz
63	737	C-C Chemokine Receptor 3	Research Diagnostics
63	737	C-C Chemokine Receptor 3	Santa Cruz
65	738	C-C Chemokine Receptor 4	Capralogics
65	738	C-C Chemokine Receptor 4	Research Diagnostics
65	738	C-C Chemokine Receptor 4	Santa Cruz
67	741	C-C Chemokine Receptor 7	Research Diagnostics
67	741	C-C Chemokine Receptor 7	Santa Cruz
69	742	C-C Chemokine Receptor 8	Chemicon
70	742	C-C Chemokine Receptor 8	Chemicon
71	742	C-C Chemokine Receptor 8	Chemicon
73	752	CXC Chemokine Receptor 3	Research Diagnostics
73	752	CXC Chemokine Receptor 3	Santa Cruz
73	752	CXC Chemokine Receptor 3	Zymed
75	753	CXC Chemokine Receptor 4	Biosource
75	753	CXC Chemokine Receptor 4	Calbiochem
75	753	CXC Chemokine Receptor 4	Capralogics
75	753	CXC Chemokine Receptor 4	Chemicon
75	753	CXC Chemokine Receptor 4	eBioscience
75	753	CXC Chemokine Receptor 4	Research Diagnostics
75	753	CXC Chemokine Receptor 4	Santa Cruz
77	755	Complement Component 3a Receptor 1	Chemokine.com
79	758	Complement Component 5a Receptor 1	Santa Cruz
83	832	Cannabinoid Receptor 1	Alpha Diagnostic Int.
83	832	Cannabinoid Receptor 1	Biosource
83	832	Cannabinoid Receptor 1	Calbiochem
83	832	Cannabinoid Receptor 1	Cayman
83	832	Cannabinoid Receptor 1	Chemicon
83	832	Cannabinoid Receptor 1	Santa Cruz
85	833	Cannabinoid Receptor 2	Alpha Diagnostic Int.
85	833	Cannabinoid Receptor 2	Calbiochem
85	833	Cannabinoid Receptor 2	Cayman
85	833	Cannabinoid Receptor 2	Chemicon
85	833	Cannabinoid Receptor 2	Santa Cruz
97	1240	Dopamine Receptor D1	Alpha Diagnostic Int.
97	1240	Dopamine Receptor D1	Biogenesis

97	1240	Dopamine Receptor D1	Calbiochem
97	1240	Dopamine Receptor D1	Chemicon
97	1240	Dopamine Receptor D1	FabGennix through Abcam
97	1240	Dopamine Receptor D1	Research Diagnostics
97	1240	Dopamine Receptor D1	Santa Cruz
99	1241	Dopamine Receptor D5	Alpha Diagnostic Int.
99	1241	Dopamine Receptor D5	Biogenesis
99	1241	Dopamine Receptor D5	Calbiochem
99	1241	Dopamine Receptor D5	Chemicon
99	1241	Dopamine Receptor D5	Santa Cruz
101	1242	Dopamine Receptor D2	Alpha Diagnostic Int.
101	1242	Dopamine Receptor D2	Biogenesis
101	1242	Dopamine Receptor D2	Calbiochem
101	1242	Dopamine Receptor D2	Chemicon
101	1242	Dopamine Receptor D2	DPC Biermann/Acris
101	1242	Dopamine Receptor D2	FabGennix through Abcam
101	1242	Dopamine Receptor D2	Research Diagnostics
101	1242	Dopamine Receptor D2	Santa Cruz
103	1243	Dopamine Receptor D3	Alpha Diagnostic Int.
103	1243	Dopamine Receptor D3	Biogenesis
103	1243	Dopamine Receptor D3	Calbiochem
103	1243	Dopamine Receptor D3	Chemicon
103	1243	Dopamine Receptor D3	Research Diagnostics
103	1243	Dopamine Receptor D3	Santa Cruz
103	1243	Dopamine Receptor D3	Zymed
105	1244	Dopamine Receptor D4	Alpha Diagnostic Int.
105	1244	Dopamine Receptor D4	Biogenesis
105	1244	Dopamine Receptor D4	Calbiochem
105	1244	Dopamine Receptor D4	Chemicon
105	1244	Dopamine Receptor D4	DPC Biermann/Acris
105	1244	Dopamine Receptor D4	Santa Cruz
107	1267	Opioid Receptor, delta 1 (OPRD1)	Biosource
107	1267	Opioid Receptor, delta 1 (OPRD1)	Calbiochem
107	1267	Opioid Receptor, delta 1 (OPRD1)	DPC Biermann/Acris
107	1267	Opioid Receptor, delta 1 (OPRD1)	Santa Cruz
113	1486	Endothelin B Receptor	Biogenesis
113	1486	Endothelin B Receptor	Capralogics
113	1486	Endothelin B Receptor	DPC Biermann/Acris
113	1486	Endothelin B Receptor	Fitzgerald Industries Int.
113	1486	Endothelin B Receptor	Research Diagnostics
115	1488	Endothelin A Receptor	Biogenesis
115	1488	Endothelin A Receptor	Capralogics
115	1488	Endothelin A Receptor	DPC Biermann/Acris
115	1488	Endothelin A Receptor	Fitzgerald Industries Int.
115	1488	Endothelin A Receptor	Research Diagnostics
117	1598	Calcium-Sensing Receptor (CASR)	Chemicon
117	1598	Calcium-Sensing Receptor (CASR)	DPC Biermann/Acris

121	1681	Follicle Stimulating Hormone Receptor	Biogenesis
121	1681	Follicle Stimulating Hormone Receptor	DPC Biermann/Acris
121	1681	Follicle Stimulating Hormone Receptor	Santa Cruz
125	1762	Galanin Receptor GalR1	Alpha Diagnostic Int.
135	1925	Gonadotropin-Releasing Hormone Receptor	Biocarta
135	1925	Gonadotropin-Releasing Hormone Receptor	Lab Vision Corporation/NeoMarkers
135	1925	Gonadotropin-Releasing Hormone Receptor	Research Diagnostics
135	1925	Gonadotropin-Releasing Hormone Receptor	Santa Cruz
139	1951	Growth Hormone Secretagogue Receptor	Santa Cruz
143	2120	Histamine H1 Receptor	Alpha Diagnostic Int.
143	2120	Histamine H1 Receptor	Chemicon
145	2121	Histamine H2 Receptor	Alpha Diagnostic Int.
145	2121	Histamine H2 Receptor	Chemicon
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Biosource
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Calbiochem
147	2783	Opioid Receptor, kappa 1 (OPRK1)	DPC Biermann/Acris
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Santa Cruz
151	2976	Lysophosphatidic Acid Receptor Edg2	Exalpha Biologicals
155	3057	Melanocortin 3 Receptor (MC3R)	Alpha Diagnostic Int.
155	3057	Melanocortin 3 Receptor (MC3R)	Chemicon
155	3057	Melanocortin 3 Receptor (MC3R)	Research Diagnostics
155	3057	Melanocortin 3 Receptor (MC3R)	Santa Cruz
157	3058	Melanocortin 4 Receptor (MC4R)	Alpha Diagnostic Int.
157	3058	Melanocortin 4 Receptor (MC4R)	Chemicon
157	3058	Melanocortin 4 Receptor (MC4R)	Research Diagnostics
157	3058	Melanocortin 4 Receptor (MC4R)	Santa Cruz
159	3059	Melanocortin 5 Receptor (MC5R)	Alpha Diagnostic Int.
159	3059	Melanocortin 5 Receptor (MC5R)	Chemicon
159	3059	Melanocortin 5 Receptor (MC5R)	Research Diagnostics

159	3059	Melanocortin 5 Receptor (MC5R)	Santa Cruz
161	3061	Melanocortin 1 Receptor (MC1R)	Alpha Diagnostic Int.
161	3061	Melanocortin 1 Receptor (MC1R)	Chemicon
161	3061	Melanocortin 1 Receptor (MC1R)	Research Diagnostics
161	3061	Melanocortin 1 Receptor (MC1R)	Santa Cruz
169	3093	Metabotropic Glutamate Receptor 1	Chemicon
171	3094	Metabotropic Glutamate Receptor 2	Chemicon
173	3095	Metabotropic Glutamate Receptor 3	Chemicon
175	3096	Metabotropic Glutamate Receptor 4	Zymed
177	3097	Metabotropic Glutamate Receptor 5	Chemicon
183	3100	Metabotropic Glutamate Receptor 8	Chemicon
185	3212	Opioid mu-type Receptor	Biosource
185	3212	Opioid mu-type Receptor	Calbiochem
185	3212	Opioid mu-type Receptor	Chemicon
185	3212	Opioid mu-type Receptor	DPC Biermann/Acris
185	3212	Opioid mu-type Receptor	Santa Cruz
187	3223	Muscarinic acetylcholine Receptor M1	Biogenesis
187	3223	Muscarinic acetylcholine Receptor M1	Calbiochem
187	3223	Muscarinic acetylcholine Receptor M1	Chemicon
187	3223	Muscarinic acetylcholine Receptor M1	Santa Cruz
189	3224	Muscarinic acetylcholine Receptor M2	Biogenesis
189	3224	Muscarinic acetylcholine Receptor M2	Calbiochem
189	3224	Muscarinic acetylcholine Receptor M2	Chemicon
189	3224	Muscarinic acetylcholine Receptor M2	Santa Cruz
191	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
192	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
191	3226	Muscarinic acetylcholine Receptor M4	Chemicon
192	3226	Muscarinic acetylcholine Receptor M4	Chemicon
191	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz

192	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz
194	3227	Muscarinic Acetylcholine Receptor M5	Biogenesis
194	3227	Muscarinic Acetylcholine Receptor M5	Santa Cruz
200	3404	Neuropeptide Y Receptor Type 2	Biogenesis
202	3405	Neuropeptide Y Receptor Type 4	Biogenesis
206	3408	Neurotensin Receptor Type 1	Santa Cruz
208	3452	Opiate Receptor-Like 1 (OPRL1)	Santa Cruz
214	3582	Oxytocin Receptor	Santa Cruz
216	3589	Purinergic Receptor P2Y ₂ , G-protein coupled, 2 (P2RY2)	Chemicon
216	3589	Purinergic Receptor P2Y ₂ , G-protein coupled, 2 (P2RY2)	Zymed
218	3595	Purinergic Receptor P2Y ₁	Chemicon
218	3595	Purinergic Receptor P2Y ₁	Zymed
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Biocarta
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Lab Vision Corporation/NeoMarkers
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Santa Cruz
236	3846	Sphingolipid Receptor Edg1	Exalpha Biologicals
238	3847	Sphingolipid Receptor Edg3	Exalpha Biologicals
240	3848	C-C Chemokine Receptor 9	Research Diagnostics
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemicon
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemokine.com
248	3852	CX3C Chemokine Fractalkine Receptor 1	eBioscience
250	3853	G Protein-Coupled Receptor GPR15	Santa Cruz
264	3860	G Protein-Coupled Receptor SLC/MCH1	Alpha Diagnostic Int.
264	3860	G Protein-Coupled Receptor SLC/MCH1	Santa Cruz
295	3927	Prostaglandin E Receptor EP4	Cayman
299	4051	Proteinase-Activated Receptor 2	Research Diagnostics
299	4051	Proteinase-Activated Receptor 2	Santa Cruz
301	4052	Proteinase-Activated Receptor 3	Research Diagnostics
301	4052	Proteinase-Activated Receptor 3	Santa Cruz
305	4254	Rhodopsin	Biocarta
305	4254	Rhodopsin	DPC Biermann/Acris
311	4480	Somatostatin Receptor Type 1	Santa Cruz

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313	4481	Somatostatin Receptor Type 2	Biogenesis
313	4481	Somatostatin Receptor Type 2	Santa Cruz
315	4482	Somatostatin Receptor Type 3	Santa Cruz
317	4483	Somatostatin Receptor Type 4	Santa Cruz
319	4484	Somatostatin Receptor Type 5	Santa Cruz
321	4552	Tachykinin Receptor 1	Santa Cruz
323	4687	Thrombin Receptor	DPC Biermann/Acris
323	4687	Thrombin Receptor	Research Diagnostics
323	4687	Thrombin Receptor	Santa Cruz
325	4734	Thyrotropin Releasing Hormone Receptor	Santa Cruz
327	4944	Angiotensin II Type 1 Receptor	Alpha Diagnostic Int.
327	4944	Angiotensin II Type 1 Receptor	Biocarta
327	4944	Angiotensin II Type 1 Receptor	Biogenesis
327	4944	Angiotensin II Type 1 Receptor	Capralogics
327	4944	Angiotensin II Type 1 Receptor	Chemicon
327	4944	Angiotensin II Type 1 Receptor	DPC Biermann/Acris
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Lab Vision Corporation/NeoMarkers
327	4944	Angiotensin II Type 1 Receptor	Santa Cruz
329	4946	Angiotensin II Type 2 Receptor	Alpha Diagnostic Int.
329	4946	Angiotensin II Type 2 Receptor	DPC Biermann/Acris
329	4946	Angiotensin II Type 2 Receptor	Santa Cruz
331	5072	Pyrimidinergic Receptor P2Y4	Chemicon
333	5117	Vasopressin V1A Receptor	Chemicon
335	5118	Vasopressin V1B Receptor	Alpha Diagnostic Int.
335	5118	Vasopressin V1B Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Alpha Diagnostic Int.
337	5119	Vasopressin V2 Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Research Diagnostics
347	6031	SIV/HIV Receptor BONZO	Santa Cruz
349	6204	Lysophosphatidic Acid Receptor Edg4	Exalpha Biologicals
351	6213	C-C Chemokine Receptor 5	Calbiochem
351	6213	C-C Chemokine Receptor 5	Capralogics
351	6213	C-C Chemokine Receptor 5	Chemicon
351	6213	C-C Chemokine Receptor 5	Research Diagnostics
351	6213	C-C Chemokine Receptor 5	Santa Cruz
361	6853	Purinergic Receptor P2Y11	Zymed

365	7221	Galanin Receptor GalR2	Alpha Diagnostic Int.
367	7246	Orexin Receptor 1	Alpha Diagnostic Int.
369	7247	Orexin Receptor 2	Alpha Diagnostic Int.
371	8436	Platelet-Activating Factor Receptor	Cayman
371	8436	Platelet-Activating Factor Receptor	Santa Cruz
377	9421	Neuropeptide Y Receptor Type 1	Biogenesis
377	9421	Neuropeptide Y Receptor Type 1	DPC Biermann/Acris
379	9834	Corticotropin releasing factor Receptor 1	Research Diagnostics
379	9834	Corticotropin releasing factor Receptor 1	Santa Cruz
385	14198	Interleukin-8 Receptor B	Biosource
385	14198	Interleukin-8 Receptor B	R&D Systems
385	14198	Interleukin-8 Receptor B	Research Diagnostics
385	14198	Interleukin-8 Receptor B	Santa Cruz
387	14641	Calcitonin Receptor	Santa Cruz
389	16041	C-C Chemokine Receptor 6	Research Diagnostics
389	16041	C-C Chemokine Receptor 6	Santa Cruz
391	16599	Smoothened	Research Diagnostics
391	16599	Smoothened	Santa Cruz
397	17535	Gaba(b) Receptor 1	Alpha Diagnostic Int.
397	17535	Gaba(b) Receptor 1	Calbiochem
397	17535	Gaba(b) Receptor 1	Chemicon
397	17535	Gaba(b) Receptor 1	Santa Cruz
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	Santa Cruz
435	54053	Gaba(b) Receptor 2	Alpha Diagnostic Int.
435	54053	Gaba(b) Receptor 2	Chemicon
439	56923	Muscarinic acetylcholine Receptor M3	Biogenesis
439	56923	Muscarinic acetylcholine Receptor M3	Santa Cruz
457	152201	Thyrotropin Receptor	DPC Biermann/Acris
457	152201	Thyrotropin Receptor	Santa Cruz
459	152245	C-C Chemokine Receptor 2	Research Diagnostics
459	152245	C-C Chemokine Receptor 2	Santa Cruz
461	152299	Interleukin-8 Receptor A	Biosource
462	152299	Interleukin-8 Receptor A	Biosource
461	152299	Interleukin-8 Receptor A	R&D Systems
462	152299	Interleukin-8 Receptor A	R&D Systems
461	152299	Interleukin-8 Receptor A	Research Diagnostics
462	152299	Interleukin-8 Receptor A	Research Diagnostics
461	152299	Interleukin-8 Receptor A	Santa Cruz
462	152299	Interleukin-8 Receptor A	Santa Cruz
468	159973	Vasoactive Intestinal Polypeptide Receptor 1	Exalpha Biologicals
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	Exalpha Biologicals
472	160055	Motilin Receptor (GPR38)	Santa Cruz

503	160228	T-Cell Death-Associated Gene 8 (GPR65)	Santa Cruz
507	160312	Sphingolipid Receptor Edg5	Exalpha Biologicals
515	160329	Proteinase-Activated Receptor 4	Santa Cruz
535	161214	Galanin Receptor GalR3	Alpha Diagnostic Int.
537	161221	Urotensin-II Receptor (GPR14)	Santa Cruz
546	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Cayman
548	177191	Histamine H3 Receptor	Alpha Diagnostic Int.
548	177191	Histamine H3 Receptor	Chemicon
552	180956	Lysophosphatidic Acid Receptor Edg7	Exalpha Biologicals
562	189900	Sphingolipid Receptor Edg8	Exalpha Biologicals
628	190774	Histamine H4 Receptor	Alpha Diagnostic Int.
628	190774	Histamine H4 Receptor	Chemicon
636	190955	Leukotriene B4 Receptor BLT1	Cayman